WORKING TITLE: Social Landscape Assessment of Browns Canyon National Monument

Browns Canyon National Monument

May 2017 PUBLIC REVIEW DRAFT

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Executive Summary

In fall 2016, the U.S. Forest Service (USFS) and Bureau of Land Management (BLM) initiated two complementary processes to elicit public perspectives on the social, economic, environmental, and resource conditions of the Browns Canyon National Monument landscape. The intent was to better understand what is important to individuals, local communities, and other stakeholders; foster positive federal-state-private working relationships; and offer the public early and engaging opportunities for meaningful participation with regard to the Browns Canyon National Monument landscape.

The agencies engaged the Consensus Building Institute, a impartial nonprofit that helps groups collaborate, to conduct a stakeholder analysis and situation assessment that would assist the agencies in understanding the public's values, interests, and concerns related to the Browns Canyon National Monument. Simultaneously, USFS and University of Colorado at Colorado Springs hosted a series of six public listening sessions in communities in the Arkansas River Valley and the Front Range, as well as an online listening session. The listening sessions utilized a method called Human Ecology Mapping, which links social and spatial data.

To bring Browns Canyon National Monument to fruition, by law and presidential direction, BLM and USFS in cooperation with Colorado Parks & Wildlife (CPW) must develop a management plan for the monument. The data and findings derived through the situation assessment and human ecology mapping will inform the planning process for developing a national monument management plan.

This report summarizes the situation assessment and human ecology mapping methodologies, findings, and recommendations; synthesizes the findings of the two approaches; and examines the benefits of using both tools in tandem.

Methodology: Situation Assessment

To understand and reflect the variety of perspectives on Browns Canyon National Monument, CBI conducted 15 confidential stakeholder interviews with 21 individuals representing range of stakeholder interests from the local community, urban users, "friends of" groups, recreation, grazing, environmental, water, mining, local business, and local and state government. During interviews, CBI invited participants to articulate their values, interests, and concerns related to the present and future conditions of Browns Canyon National Monument and suggestions for the management planning process and outreach.

Interview Findings

Findings reflect stakeholder feedback on values, hopes, and concerns associated with the Browns Canyon National Monument landscape, including the critical issues and the process.

 Interviewees deeply appreciate the unique experience that the Browns Canyon National Monument landscape offers: rugged, remote, and solitude away from development.

- Interviewees describe a range of quality recreation opportunities available in the monument: rafting, hiking, walking horseback riding, camping, and rock climbing.
- Interviewees emphasize the need for a balance between providing access to the monument while maintaining opportunities for quiet and solitude that characterize the Browns Canyon landscape.
- Interviewees recognize that the designation creates special considerations for managing Browns Canyon as a monument.
- Interviewees point to the challenges of regulation and enforcement. Monument status
 may create a need to actively manage activities, and enforcement in such a remote area can
 prove challenging.
- A number of interviewees identify local economic impacts (opportunities and challenges) of the monument designation.
- Stakeholders recognize the need to secure funding for county road improvements.
- Interviewees widely recognize the importance of a collaborative management approach among the agencies, "friends" groups, and other partners.
- Interviewees recommend a wide range of communication channels for engaging stakeholders effectively.

Recommendations for Future Engagement

The Consensus Building Institute (CBI) specifically invited participants to identify opportunities and tools to share information and engage stakeholders interested in Browns Canyon National Monument. CBI also developed a database of interested parties and stakeholders for future outreach purposes. These recommendations are intended to inform the planning process and enhance the opportunity to listen, identify, and compile public views. CBI recommends the following strategies for planning and engagement:

- Design a multimedia approach effective for reaching stakeholders. Browns Canyon enjoys diverse stakeholder who are active on social media, participate in organized groups, and others who read the local paper.
- Engage Browns Canyon local neighbors though in-person workshops and community meetings.
- Create online opportunities for learning and contributing to the management planning process. Strong online participation for the human ecology mapping and national interest in the monument indicate that online webinars and engagement can provide opportunities for input.

Methodology: Human Ecology Mapping

USFS and BLM hosted six listening sessions in communities in the Arkansas River Valley and the Front Range, with a total of 133 participants. In addition, an online listening session generated 178 responses. The listening sessions included open discussions about place connections, the importance of Browns Canyon National Monument, and special features that draw people to the monument. Collectively, listening session participants mapped 644 resource interactions and identified 312 special places. Findings reflect the following key themes:

Landscape Connections - Participants shared a variety of ways that they connect with the landscape. Several participants were ranchers who had lived in Chaffee County for multiple

generations and leased land adjacent to the Monument. Some were raft guides who had moved to the area in the 1980s and stayed on to raise families and run outfitting and guiding businesses. Another subset of participants would be considered frequent repeat visitors – people who enjoy Browns Canyon and return several times throughout the year for outdoor recreation or specialized activities, such as gem collecting. Participants also included newly arrived retirees, seasonal residents and second homeowners, and a subset of wilderness advocates, some of whom had never been to Browns Canyon. People shared their stories and provided rich descriptions of their relationships to the place and to the landscape.

Special Qualities of Browns Canyon - Participants were asked what makes Browns Canyon a special place. The responses received paint a picture of a highly accessible place with diverse recreation and heritage opportunities as well as scenery, unique geology, springs, gulches, wildlife, and riparian systems. The most prominent feature of Browns Canyon was the Arkansas River, which seems to be the backbone of the Monument. However, many lauded the solitude found on hiking trails and off-trail in the backcountry regions of the Monument. Others talked about the historical resources, particularly the railroad and the ghost town (Turret).

Resource Interactions - Participants drew on maps with markers to describe the places in the Monument that they like to visit and the activities they engage in while they are there. The most common activities were viewing nature, hiking, observing wildlife, photography, relaxing, camping, and rafting. The highest density of areas that participants mapped were located along the Arkansas River, Ruby Mountain, Hecla Junction, Turret, and Aspen Ridge Road.

Special Places - Participants identified their top 3 favorite places on the Monument using sticker dots. The most prominent places mentioned included: Arkansas River, Ruby Mountain, Hecla Junction, Aspen Ridge, and the Turret area. The most frequent landscape values were attached to these special places included recreation, scenic quality, relaxation, and solitude.

Management Ideas and Concerns - Participants offered numerous comments and suggestions about how to improve management of Browns Canyon. Some requests were made for facilities improvements in high-use areas. Others were concerned about providing more recreation infrastructure, which could potentially attract more visitors. Some talked about the need to regulate commercial rafters due to the increase in commercial boat traffic and challenges for recreation boaters to find pieces of solitude. The desire to provide recreation opportunities and cater to visitors while protecting the area's social and natural conditions. Access was another major theme. Some were concerned that the new Monument status would reduce access for traditional and historic users of the area.

Synthesis of Methodologies

Despite differences in scale, scope, and focus of the two methodologies, many of the same themes emerged in both the situation assessment and the HEM approaches. The fact that two distinct approaches were used to elicit ideas about Browns Canyon and the same set of themes emerged from both approaches gives them added weight. We identified 10 themes in particular:

- Desire to share the wonders of Browns Canyon with visitors, but concern about impacts to the biophysical and social environment from over-use, spillover, or dispersal of visitors into new territories (social trails, dispersed camping sites.)
- Desire of local communities who depend on resource-based industries
 (recreation/tourism, grazing) to maintain a viable source of revenue while also having a
 level of visitation and residential growth that is sustainable for nearby communities.
- Desire to have adequate and ample facilities to manage high-density areas (e.g., Hecla Junction, Ruby Mountain) and to accommodate a diverse range of uses, but to emphasize low-developed, 'primitive' sites to provide more dispersed or rugged experiences without facilities.
- Desire to expand and improve trails and river facilities to accommodate a variety of recreation users (motorized, equestrian, mountain bikers, seniors, ADA), but also provide places in the Monument that are harder to reach, where solitude can be found.
- Desire for commercial river outfitters to provide quality visitor experiences, but for recreational boaters and fishers to also have opportunities for using the river without being crowded.
- Desire for a balance between traditional and historic resource uses (grazing, logging, prospecting) and recreation-based industries (fishing, whitewater boating, hiking) and amenities.
- Need to address concerns of adjacent private landowners and the issue of visitors wandering off-trail and trespassing on homes near the Monument (especially Turret area).
- Specific concerns for developed facilities at high-use sites (put-ins, trailheads, campsites)
 where crowding is causing challenges for parking and sanitation and raising concerns for
 visitor safety and satisfaction; rooted in a desire to help visitors launch their journeys in a
 way that is safe and satisfying.
- Recognition of the Monument's historic and cultural heritage resources and a desire for targeted management of these areas, including restoration and interpretation (mining, railroad).
- Recognition of the Monument's potential as a place for learning, discovery, and
 environmental education. The Monument's compact and accessible nature as well as the
 uniqueness and diversity of wildlife, geology, history, culture, and recreation opportunities
 make this area an ideal learning laboratory.

Conclusion

This report summarizes a pilot approach to integrate collaborative planning methods early in anticipation of developing the Browns Canyon National Monument management plan. This study relied on two processes: the stakeholder situation assessment and human ecology mapping. The situation assessment approach gathered information as a part of a larger set of processes and events in the region and addresses questions about 'the who?' 'the what?' and 'the why?' The human ecology mapping approach strongly emphasizes the geographic context and answers questions about 'the where?' 'the how?' and 'the when?' Taken together, these two approaches

weave a rich tapestry that shows the connections, the colors, and the textures of the Browns Canyon social landscape and will contribute to the USFS assessment of the planning area and BLM's analysis of the management situation for Browns Canyon National Monument.



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Introduction

In February 2015, President Obama designated 21,604 acres in Colorado's Upper Arkansas River Valley as Browns Canyon National Monument. The U.S. Forest Service and Bureau of Land Management in partnership with Colorado Parks and Wildlife will jointly manage the Monument, which includes 11,811 acres of the San Isabel National Forest and 9,793 acres of Bureau of Land Management land. The landscape of the monument consists of a mix of rugged canyons, rivers, and backcountry forest. The section of the Arkansas River that runs through the Monument is widely considered to be the most rafted river corridor in North America. The Monument is located between the towns of Buena Vista and Salida in Chaffee County, Colorado.

In fall 2016, the U.S. Forest Service and Bureau of Land Management initiated two complementary processes to elicit perspectives held by the public about the social, economic, environmental, and resource conditions of Browns Canyon National Monument; to better understand what is important to individuals, local communities, and other stakeholders with regard to Browns Canyon National Monument; to foster positive federal-state-private working relationships; and to offer the public early, easy and engaging opportunities for meaningful participation.

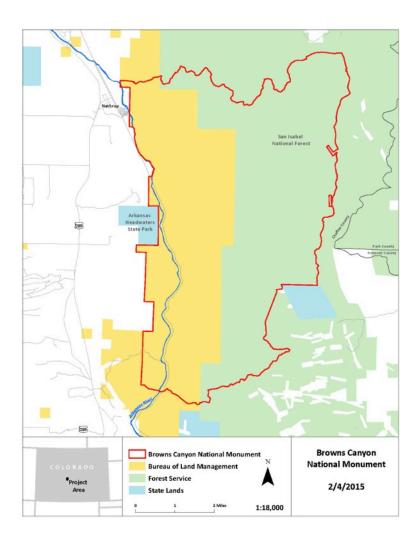
The agencies engaged the Consensus Building Institute (CBI), an impartial nonprofit that helps groups collaborate, to conduct a stakeholder analysis and assessment that would assist the agencies in understanding the public's values, interests, and concerns related to the Browns Canyon National Monument landscape. Simultaneously, the U.S. Forest Service and University of Colorado at Colorado Springs conducted a series of six public listening sessions and an online listening session for those unable to attend in person. The listening sessions utilized a method called human ecology mapping, developed by the US Forest Service Pacific Northwest Research Station which links social and spatial data. The data derived through these two methodologies will inform the process of developing a national monument management plan.

This report summarizes the situation assessment methodology, interview findings, and process recommendations, the human ecology mapping methodology, findings, and recommendations, examines the benefits of using both tools in tandem, and synthesizes the findings of the two approaches.

Context

Brief History of Browns Canyon National Monument

On February 19, 2015, President Barack Obama proclaimed the Browns Canyon National Monument under the Antiquities Act of 1906. The Monument was founded to protect diverse geologic, ecological, and cultural resources, objects, and values in a rugged and scenic area of approximately 21,604 acres along the upper Arkansas River of Colorado. The Monument encompasses lands managed by both the Bureau of Land Management (BLM) and the U.S. Forest Service (USFS). The two agencies were directed in the Proclamation to develop a joint management plan. Lands that are now within the Monument boundary were already federal land and have been subject to BLM and USFS management plans previous to now. The Colorado Parks and Wildlife (CPW) are a third government entity involved. CPW has a cooperative agreement to manage river-based recreation through the Arkansas Headwaters Recreation Area and a section of that recreation area lies within Browns Canyon National Monument (BCNM).



Pilot Approach to Pre-Planning Activities

This project served as a pilot opportunity to integrate collaborative methods as part of the earliest life-cycle stage of a federal land planning process - the inventory and assessment, or pre-planning, stage. The pilot used an interdisciplinary approach and collaborative process by employing methods typically applied during dispute resolution with methods from social science to learn about human-land relationships at the front-end of a public planning process-before any specific disputes or conflicts arise. The goals were to provide the field staff practical ways to learn both spatial and non-spatially tied perspectives held by the public about the social, economic, environmental, and resource conditions of Browns Canyon National Monument; better understand what is important to individuals, local communities, and other stakeholders with regard to Browns Canyon National Monument; foster positive federal-state-private working relationships; and offer the public early, easy and engaging ways to meaningfully participate. The primary methods employed include a stakeholder analysis, situation (stakeholder issue) assessment, and human ecology mapping (a form of participatory mapping).

The results will contribute to USFS assessment of the planning area and the BLM's analysis of the management situation for Browns Canyon National Monument. The goodwill and working relationships that this process has already fostered suggest a success toward the goals set. Positive traction has been developed that is meant to continue and grow through the upcoming planning cycle and onto future planning cycles.

Integrated Findings

Synthesis of Approaches

One of the goals of this project was to explore how two different approaches to understanding the social landscape of a national monument – a situation assessment and Human Ecology Mapping (HEM) - could be conducted concurrently and synthesized to achieve a greater depth of insight. Each approach had its own goals, but the broader objective was the same: to better understand what matters to people about Browns Canyon National Monument and what role the Monument plays in the lives and livelihoods of its constituents. For people who care about Browns Canyon, what does the Monument mean to them and what concerns do people have about how the area is being governed?

CBI designed the stakeholder analysis and situation assessment to identify key organizations and individuals who care about Browns Canyon and to understand their interests, positions, and influence. The situation assessment provided an opportunity for in-depth discussions with a set of diverse stakeholders to identify the multiple ways that the Monument touches people's lives and provides a place to work, play, relax, learn, and connect. This approach also identified benefits, opportunities, and challenges associated with the Monument and its management. The Human Ecology Mapping (HEM) approach, designed by the US Forest Service Pacific Northwest Research Station, also explored human connections with Browns Canyon with an emphasis on the place itself. The maps prompted participants to describe and depict how they value and use the Monument, where they go, how often, and when. Together, these two approaches tell a complete story and provide deeper insight than one approach alone. The combination of approaches has resulted in a more rounded, robust set of information in several areas. Both approaches have value and make a unique contribution.

Scope and Scale

The situation assessment and HEM approaches each offered a different lens for viewing Browns Canyon in the context of the broader social setting. The situation assessment approach sought to identify an initial set of individuals whose organizations have in the Monument and its management (e.g., municipal officials, organization leaders, business owners, guides). The intent was to learn from these officials how the Monument might contribute to or challenge the goals of their organizations or constituents. Thus, the situation assessment results emphasize larger themes and topics of deliberation that resonate with stakeholders. The HEM approach focuses primarily on the Monument and seeks input from a larger pool of 330 participants. Those who provided input in the HEM component included organization leaders and members as well as members of the general public who were not affiliated with a particular group, but who are interested in the Monument.

Stories and Maps

The situation assessment approach used an elicitive interview protocol, where participants contemplated a set of open-ended prompts, and the interviewers asked follow-up questions to go

deeper and explore ideas. This allowed participants to tell stories about their relationship to Browns Canyon and how their organization responds to changes in environmental and social conditions found there. The HEM approach relies primarily on maps to tell the story. Participants used maps to talk about their place meanings and drew on maps to describe their landscape values and interactions.

Depth and Diversity

The situation assessment approach provides in-depth understanding of critical issues and untapped opportunities from the perspective of a range of stakeholders, representing diverse interests. Detailed conversations resulted in a deeper understanding of the complexity of issues and how management of Browns Canyon impacts the region in various ways. The HEM approach used maps and prompts to capture peoples' relationships with Browns Canyon and elicited short (1-2 sentence) responses about their connections, meanings, landscape values, and resource interactions, and management concerns. These shorter responses were often more similar to tweets than full stories or explanations gathered in the situation assessment approach. Taken together, the aggregated 'tweets' from 330 participants tell a story. Combined with the situation assessment interviews, a full, comprehensive picture is rendered.

Subtle and Spicy

In the situation assessment approach, participants talked personally with an interviewer from CBI and had time and space to tell their stories, share their opinions, and identify priorities. The interviewer and participant were able to establish a rapport, and interviewees had the opportunity to explain the rationale behind a particular viewpoint, which resulted in measured and thoughtful responses in most cases. The HEM approach combined both online and in-person listening sessions with opportunities for written responses in a short-answer format. As a result, the HEM responses were potentially more concise, blunt, and forceful. Opinions were sometimes expressed strongly in the cloak of anonymity. The way of gathering information resulted in two sets of qualitative information that are characterized by different degrees of emotional intensity. The combination of measured, nuanced discussions with short, quick-fire responses allows a more robust and rich trove of information than either of the approaches could garner alone.

Big and Small

The situation assessment approach featured lengthy conversations with people who typically have a deep understanding of the broader economic and political processes underway and who may be well versed in natural resources management, environmental planning, or regional development. The HEM approach included a broad cross-section of local and nonlocal residents with a range of experiences in the world of resource planning and management. The situation assessment approach yielded information that emphasized aspects of resource governance and that was contemplative of how best to design the planning process. The HEM approach included questions that prompted consideration of Monument management, but responses were typically site-specific, dealing with a particular boat launch or trailhead junction, which will be useful to

managers. Because of the intense focus on sites and places, few stepped back to consider the big picture or talked about the Monument's role in regional development or as a national treasure.

Continuities

Despite these critical differences in scale, scope, and focus, many of the same themes emerged in both the situation assessment and the HEM approaches. The fact that two distinct approaches were used to elicit ideas about Browns Canyon and the same set of themes emerged from both approaches gives them added weight. We identified 10 themes in particular:

- Desire to share the wonders of Browns Canyon with visitors, but concern about impacts to the biophysical and social environment from over-use, spillover, or dispersal of visitors into new territories (social trails, dispersed camping sites.)
- Desire of local communities who depend on resource-based industries
 (recreation/tourism, grazing) to maintain a viable source of revenue, while also having a
 level of visitation and residential growth that is sustainable for nearby communities.
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- Desire to expand and improve trails and river facilities to accommodate a variety of recreation users (motorized, equestrian, mountain bikers, seniors, ADA), but also provide places in the Monument that are harder to reach, where solitude can be found.
- Desire for commercial river outfitters to provide quality visitor experiences, but for recreational boaters and fishers to also have opportunities for using the river without being crowded.
- Desire for a balance between traditional and historic resource uses (grazing, logging, prospecting) and recreation-based industries (fishing, whitewater boating, hiking) and amenities.
- Need to address concerns of adjacent private landowners and the issue of visitors wandering off-trail and trespassing on homes near the Monument (especially Turret area)
- Specific concerns for developed facilities at high-use sites (put-ins, trailheads, campsites) where crowding is causing challenges for parking and sanitation and raising concerns for visitor safety and satisfaction; rooted in a desire to help visitors launch their journeys in a way that is safe and satisfying.
- Recognition of the Monument's historic and cultural heritage resources and a desire for targeted management of these areas, including restoration and interpretation (mining, railroad).
- Recognition of the Monument's potential as a place for learning, discovery, and
 environmental education. The Monument's compact and accessible nature as well as the
 uniqueness and diversity of wildlife, geology, history, culture, and recreation opportunities
 make this area an ideal learning laboratory.

Section Summary

Overall, the situation assessment approach gathered information about Browns Canyon National Monument as a part of a larger set of processes and events in the region and addresses questions about 'the who?' 'the what?' and 'the why?' The HEM approach strongly emphasizes the geographic context and answers questions about 'the where?' 'the how?' and 'the when?' Taken together, these two approaches weave a rich tapestry that shows the connections, the colors, and the textures of the Browns Canyon social landscape.



Situation Assessment

Methodology

CBI's situation assessment is intended to understand and then reflect to interested parties the range of perspectives regarding the social, economic, environmental, and resource conditions of Browns Canyon National Monument and to better understand what's important to individuals and local communities with regard to the future of Browns Canyon National Monument. CBI paid careful attention to select a diverse group of interviewees to represent a broad spectrum of interests. CBI's methodology is grounded in best practice of collaborative problem solving and realized through these core principles: (1) soliciting input that represents a range of stakeholder perspectives; (2) being transparent in the nature of the feedback and recommendations provided; (3) drawing on CBI experience and best practices to recommend an approach likely to foster effective collaboration and planning.

CBI gathered information through stakeholder interviews. CBI facilitators Gina Bartlett and Julia Golomb conducted 15 interviews with 21 individuals with interests in the local community, urban users, "friends of" groups, recreation, grazing, environmental, water, mining, local business, and local and state government. During interviews, CBI invited participants to articulate their values, interests, and concerns related to the present and future conditions of Browns Canyon National Monument. Conducted by phone, interviews were confidential to foster candor. CBI received permission to include interviewees' insights without attribution in this report. A list of the interviewees and the interview protocol is included in the appendices.

CBI initially worked with Forest Service, Bureau of Land Management, and Colorado Parks and Wildlife staff to identify the first round of interviewees, which proved to be the majority. Then, as part of the interview process, participants recommended other stakeholders for interviews, some of whom CBI then interviewed. CBI closed the interview process when Gina and Julia felt they had a thorough understanding of the issues and concerns as well as dynamics to analyze interview findings.

Interviews focused on drawing out the interviewee's thoughts and ideas on interests and concerns tied to the vision for the future of Browns Canyon National Monument, as well as suggestions for the management planning process and outreach. CBI developed the questions in advance, with input from U.S. Forest Service, Bureau of Land Management and Colorado Parks and Wildlife staff. The interview prompts, attached in the appendix, served as a guide. Time spent on each question varied depending on the interest of the interviewees.

After preparing this report, CBI invited interview participants to review the draft findings and provide feedback on any major omissions and to ensure clarity. CBI will also present the draft findings and recommendations at a public workshop in May 2017. After this, CBI will finalize the report and its recommendations.

This report seeks to summarize the range of views, ideas, and concerns expressed. The assessment is not a comprehensive study of all the concerns with a stake in the Browns Canyon National Monument landscape. CBI did not attempt to independently validate the claims or concerns of

the interviewees, nor is the assessment a comprehensive study of all concerns with a stake in the National Monument. This report tries to reflect back key themes and concerns that help shape the way forward. CBI has sought to present these findings, in our role as impartial facilitators, as accurately and fairly as possible. Any errors or omissions are the sole responsibility of the authors.

Interview Findings

The following summarizes key themes from interviews that the Consensus Building Institute conducted.

Interviewees articulate the unique experience that the Browns Canyon National Monument landscape offers. Interviewees describe the landscape as "rugged," "remote," and "untrammeled," a place to visit for solitude and to get away from any type of development. One interviewee describes the coarse beauty of the landscape as "strikingly different from other areas in Colorado." Another interviewee articulates, "It's very rugged. The only way to travel through is on foot or horseback, or down the river." An interviewee from a nearby city appreciates that he can visit the monument in a day trip yet have a backcountry experience. Many interviewees value and want to preserve the rugged and remote nature of the Browns Canyon landscape.

Interviewees describe a range of quality recreation opportunities available in the monument. By far the largest number of visitors - approximately 500,000 people per year - experiences the monument from the Arkansas River, which one interviewee describes as the most beautiful tenmile stretch of river that he has rafted. The stretch of river that runs through the canyon draws rafters, kayakers, and anglers, many of whom travel straight through the canyon on day trips and some of whom come ashore to picnic or camp near the river bank. Others come to the monument to hike, ride horses, and rock climb. One interviewee describes the hiking as "extraordinary," while another describes the Wilderness Study Area within the monument as "a playground for hikers and equestrians. You can go back there and not worry about bicyclists, motor vehicles, or anything interrupting your day." Many interviewees wish to maintain access to a broad range of recreational opportunities, including continued rafting on the river corridor. Some express the hope of preserving quiet use areas where people can walk or ride horses without disruption.

Interviewees emphasize the need for a balance between providing access to the monument while maintaining opportunities for quiet and solitude that characterize the Browns Canyon landscape. Many interviewees support some strategic development to accommodate public access to the monument for a growing number of visitors with diverse physical abilities. Yet most interviewees also clearly express the need to balance access with that of preserving the rugged and remote character of the monument and maintaining its myriad opportunities for primitive recreation and solitude.

Interviewee: "With all this interest in the national monument, I worry about what will happen to the wilderness qualities. On the other hand, it needs to be more accessible because it's so rugged and inaccessible now. We need a balance between what people want to see in a national monument and what needs to be protected to maintain the canyon's wild and rugged qualities."

Interviewee: "There needs to be a balance, with awareness that overdevelopment or overuse can lead to degradation of the resource and the experience."

Interviewees recognize that the designation creates special considerations for managing Browns Canyon as a monument. Over time, the national monument designation will likely attract an increasing number of visitors, including visitors with a range of accessibility needs. One interviewee articulates the management goal, which many support, of "maintaining or if possible enhancing the quality of the resource and protecting the types of experiences that visitors have come to cherish, while providing a little better access if possible." In this spirit, stakeholders recommend that policies support visitor access while helping to enhance the natural resources of the area. Multiple interviewees recommend developing scenic access points on the perimeter of the monument while preserving the monument's wild interior.

Suggested infrastructure improvements:

- ➤ Interpretation: One stakeholder recommends installing informational kiosks in key areas to explain the monument. Another interviewee recommends including indigenous history in interpretive materials, and laments that the omission of indigenous history can be particularly off-putting for visitors who are people of color.
- > Trailhead improvements: Currently, adequate trailheads are primarily accessible from the river but not from land.
- ➤ ADA accessible areas: Some areas within the monument will need to be developed in such a way that supports access for visitors with a range of physical abilities and complies with the Americans with Disabilities Act,
- ➤ Parking areas: Parking area improvements are needed need to accommodate increased visitors, as well as to better accommodate access for horse trailers.
- ➤ Facilities: Some interviewees would recommend picnic areas and restrooms, especially around the perimeter.
- > Access-road improvements: Many sections of the County roads leading into the monument could benefit from repairs and improvements in order to accommodate increased traffic.

Many stakeholders point to Ruby Mountain and the Turret Trail as areas to focus site enhancements and access improvements. The Ruby Mountain trailhead is the main access point for hiking and horseback riding into Ruby Mountain, and several interviewees see the need for more parking at Ruby Mountain. Several interviewees also suggest the need for parking improvements at the Turret trailhead, which is located in the quiet town of Turret. One interviewee also identifies Turret as a good site for a picnic area. However, residents of Turret report that they tend to appreciate the remoteness of their town and may be wary of attracting outside visitors to Turret. Some stakeholders recommend accessible campsites and overlooks near Aspen Ridge, visitor facilities at Hecla Junction, and the possible addition of some - but not many - new trails. One stakeholder hopes that the railroad could be utilized in a new way, such as a

tourist train or rails-to-trails walking path. However, there is uncertainty about the feasibility of this vision as interviewees have had little success in their attempts to interface with the railroad.

Interviewee: "Less development is more, particularly in the upland area to the east of the river."

Interviewees point to the challenges of regulation and enforcement. Some interviewees note that the designation may create the need to more actively manage existing activities within the monument, including camping, boating and rafting, trail use, and some historical uses such as mining. Enforcement can prove challenging in such a vast and remote area. Because the monument may see increased use over the long term, the management plan should identify opportunities to mitigate the effects of increased use on the landscape through designated routes that funnel visitors into certain areas and by encouraging leave no trace ethics. Additionally, some stakeholders recommend clear signage that indicates permitted uses of a given trail. Though there may be increased use, the monument designation doesn't bring additional funding. As such, the three managing agencies will likely rely on partner organizations - including Friends of Browns Canyon, Quiet Use Coalition, and Friends of Fourmile - to support signage placement and other efforts to manage non-conforming uses. One interviewee notes the challenge of fire management in the interior of the monument, given the difficulty of access.

A number of interviewees identify local economic impacts of the monument designation. Some interviewees point to the economic opportunity for local communities as the designation draws more visitors to the area. Still others point to the economic hardship that the designation may bring as it increases demands on Chaffee County managed infrastructure, such as the roads leading to the monument - yet without yielding increased tax revenue. Additionally, some stakeholders are concerned about the spillover impacts of trash, traffic, and trespassing on private lands adjacent to the monument.

Stakeholders recognize the need to secure funding for County road improvements. Chaffee County manages all roads leading into the monument. Some interviewees are very concerned that road maintenance in the face of increased use will impose an excess financial burden on Chaffee County. One stakeholder articulates the value of the County and the three agencies working together to secure funding for road improvements.

Interviewees widely recognize the importance of a collaborative management approach. With the U.S. Forest Service, Bureau of Land Management and Colorado Parks and Wildlife all managing the monument in partnership, stakeholders envision the need for clear communication across the multiple agencies. While Friends of Browns Canyon previously played an advocacy role to help bring the monument to fruition, some interviewees anticipate that there is now an opportunity for the organization to pivot towards stewardship and other forms of leadership and support. Additionally, some stakeholders advise that because the entirety of Browns Canyon National Monument is situated within Chaffee County and will directly impact the County, one

or more of the County Commissioners should have a seat at the table when it comes to monument management, perhaps as a cooperating agency.

Interviewees recommend a wide range of communication channels for engaging stakeholders effectively. CBI specifically discussed suggestions for outreach and engagement on Brown's Canyon National Monument. Interviewees recognize that stakeholders are varied: some are "neighbors" to the monument, some come from Colorado urban centers, and many come long distances to enjoy the Canyon. To this end, stakeholders recommend a variety of outreach mechanisms to reach these different visitors, including email, social media, and newspaper advertisements; holding community meetings near Browns Canyon, sometimes in Denver, and via online webinars. Interviewees also recommend dovetailing with communication channels of existing stakeholder interest groups and rafting outfitters, to broadly share information about the monument and any management planning processes. In sum, stakeholders recommend the following communication tools as effective:

- ➤ Website
- > Email
- ➤ Public meetings
- ➤ Social media: Facebook and Twitter
- Newsletters: volunteer organizations tend to send regular newsletters
- > City administrations publish public announcements
- Newspaper advertisements and articles

Stakeholders

As part of the assessment, the Consensus Building Institute conducted research to identify stakeholders and other interest groups who engage and care about Browns Canyon. The following list outlines the breadth of interests in the national monument (in alphabetical order).

- Educational Institutions (local colleges, universities and high schools)
- Environmental (local, state, national)
- "Friends of" Groups
- Geology (gem and minerals)
- Government (local, state, federal)
- Grazing
- Hunting and Rifle Enthusiasts
- Local Business (outfitter, outdoor retail, gold mining, restaurant, hotel)
- Local Communities around National Monument (Turret, Northrop, Buena Vista, Salida)
- Mining Claimant
- Motorized
- Private Land Owners Adjacent to Monument
- Railroad
- Recreation: Climbing
- Recreation: River-dependent (rafting, fishing)
- Recreation: Trail-dependent (mountain biking, hiking, equestrian)
- Tribes (Note: Tribes are in formal consultation process; CBI did not conduct tribal outreach.)
- Urban Communities, including Young People, that Visit Monument
- Veteran Groups
- Water
- Youth

CBI Recommendations for Planning and Outreach

The Consensus Building Institute (CBI) has reviewed these findings and recommends the following strategies for planning and engagement. CBI specifically invited interviewees to identify opportunities and tools to share information and engage stakeholders interested in Browns Canyon National Monument. The following strategies build upon stakeholder recommendations as well as best practices in stakeholder engagement. The objective is to foster the development of communication lines and trust in federal-state-public relationships. These recommendations are intended to inform the planning process and enhance the opportunity to listen, identify, and compile public views about Browns Canyon National Monument.

The findings section of this report identifies the range of considerations that stakeholders would like the Browns Canyon National Monument Management Plan contemplate. This summary offers a snapshot of perspectives that the plan will likely need to manage and contemplate.

Because Browns Canyon National Monument has such a wide swath of stakeholders, there are different audiences and widely diverse distances between stakeholders and the monument. These recommendations attempt to identify tools to reach these different stakeholders.

Multimedia Approach Effective for Reaching Stakeholders

Based on interviewee recommendations and working with staff of the partner agencies, CBI recommends a multi-media approach to communicating about Browns Canyon National Monument. Browns Canyon enjoys diverse stakeholders who are active on social media, participate in organized groups with newsletter, and others who read the local newspaper. Given this diversity, agency partners need to develop communications plans that stretch this range of communication. Vehicles to push messaging include:

- > Press releases
- ➤ Direct email to contact lists
- **▶** Blogs
- > Twitter and Facebook
- ➤ Web sites

A number of rafting outfitters and stakeholder organizations have extensive contact lists with contacts that are very interested in the monument. These organizations welcome the opportunity to push messages out to the broader community.

Engaging Browns Canyon Local Neighbors

Local stakeholders who live nearby, even in the Colorado Springs or Denver region, recommend coming together in public meetings or community workshops. These stakeholders report that they benefit from learning from each other, hearing one another's perspectives, and engaging directly with land managers in an in-person session. The best tools to advertise public meetings or community workshops are via email announcements, newspaper advertisements, local websites, social media, and on the radio. Posting flyers at trailheads or on kiosks are also recommended.

Create Online Opportunities for Contributing and Learning

In this phase of the planning process, 178 stakeholders contributed online to human ecology mapping. This is a strong indicator that agency partners might want to continue to explore opportunities for online engagement. CBI would recommend that agency partners consider holding online webinars during management planning to engage distant stakeholders. Exploring online tools where stakeholders can learn about the monument and contribute and share interests and other values could enhance the planning process and provide new avenues of input.

Resources for Outreach

Organizations Willing to Share Information

- > Arkansas River Outfitter Association
- > Friends of Browns Canyon
- ➤ GARNA

Other Resources

- CityWild links to Denver-area youth
- Newspapers: Mountain Mail (Salida), Chaffee County Times (Buena Vista)
- ➤ Websites: Salida Citizen (popular online news source), Salida SWAP Facebook Page
- ➤ Radio: Four popular stations in the area
- > Bureau of Land Management rangers can post flyers at designated access locations
- ➤ U.S. Forest Service: Salida and Leadville media lists; Colorado congressional and local elected officials list; and planning effort website: www.BrownsCanyonPlan.org

Active Social Media

- Facebook: Forest Service, Friends of Browns Canyon
- > Twitter: Colorado Parks
- > Instagram

Human Ecology Mapping

Background

What is Human Ecology Mapping?

Human Ecology Mapping (HEM) is a form of public participation GIS (PPGIS) that gathers spatial information about human-environmental interactions as decision support for public land managers. PPGIS emerged in the 1990s as a tool for expanding public participation in environmental planning by gathering 'socio-spatial' information about public resource uses and social values using maps and aerial photographs. Over the past decade, PPGIS has been applied to a variety of resource planning projects, including national forest planning, ecosystem services assessment, indigenous community empowerment, and urban parks planning. ¹ Human Ecology Mapping (HEM) emphasizes a systematic approach to gathering spatial information about special places and resource interactions within a particular management area through public meetings, online listening sessions, and targeted outreach efforts to reach traditionally under-represented groups. Once gathered, these socio-spatial data can be integrated with biophysical, ecological, topographic or other data layers to allow planners to see where resource use is concentrated and how it interacts with physical features.

The HEM approach was developed by a joint team from the US Forest Service Pacific Northwest Research Station and Portland State University as a way to gather data about special places, social values, and resource interactions in support of federal lands management. The approach was piloted in 2012 on the Olympic National Forest (WA) and has been applied to other national forests in the Pacific Northwest. For example, it was used as a way to gather public use data on forest roads in the Mt. Baker-Snoqualmie National Forest (WA) for input to travel management planning (2013-14). And, HEM provided visioning data in anticipation of forest planning on the Deschutes and Ochoco National Forests in central Oregon (2016-17). HEM typically involves a collaborative approach with co-leadership by forest partners and friends groups. A key objective of HEM projects is to create or expand opportunities for public input into resource management decisions.

Participatory GIS methods

Methods used to collect socio-spatial data may include mail surveys, online platforms, intercept (on-site) surveys, structured interviews, mapping workshops, as well as various combinations of these methods³. A variety of mapping technologies have been used as well, including paper maps and stand-alone digital mapping applications. Approaches used to gather PPGIS data may affect who participates.⁴ Relying on just one method may leave out an important set of constituents.

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¹ See also: See: Brown and Reed 2009; McIntyre et al. 2008; Klain and Chan 2012; Raymond et al. 2009; Sherrouse et al. 2011; Ramirez-Gomez et al. 2013; Sieber 2006; Tyrväinnen et al. 2007.

² For information about the use of HEM in national forest planning efforts, see McLain et al, 2013; ; Besser et al. 2014, Biedenweg et al. 2014

³ For a detailed review of PPGIS studies, see Brown and Fagerholm (2014) and Brown and Kyttä (2014).

⁴ Two studies have compared demographic characteristics of mapping participants. One study in Alaska compared workshop v. internet participants and found that workshop participants were more likely to be male and older than either internet or paper survey respondents (Brown et al 2014). A second study in Wyoming compared online and paper mapping approaches and found that those in the workshop setting tended to be older, had lived in the area longer, and had less formal education than those who used the internet survey (Pocewicz et al 2012). Moreover,

Multiple methods have the potential to encourage participation from a wider variety of individuals and online mapping applications allow participation from non-local stakeholders.

How the data might be used

Data generated from Human Ecology Mapping can be used to inform future planning of the management area, including development of the management plan, planning for outdoor recreation and visitor use, as well as scenery management. Data can be disaggregated in a variety of ways to explore differences in resource interactions or special places by community of residence, by gender, by number of years in the community, or by type of resource use. Maps can be generated that show places where resource uses or landscape values co-exist or overlap. Places of high-intensity use by a variety of resource uses may be identified for future monitoring of resource conflicts. Places associated with particular values or uses, such as historic, cultural, or scenery, may be identified to explore how these areas are being managed to protect these values in lieu of other uses. Once the data are gathered and a database is developed, queries can be made that address a variety of management questions.

Methodology

Two concurrent public engagement approaches were designed to promote dialogue and gather public input from a variety of stakeholders and residents. The first approach used was a series of six listening sessions held in October and November 2016 resulting in 133 participants. The intent of the listening sessions was to engage local stakeholders in healthy dialogue about the

monument and to build trust in the process while gathering important information about people's connections with the monument and the surrounding area. The second approach was an online listening session designed to mirror the questions asked during the community listening sessions. The online listening session allowed participation from local residents who could not attend the community sessions as well as non-local stakeholders. The online survey was active from October 2016 to January



2017 and yielded 178 participants. In total, 311 individuals took part in this effort.

Community listening sessions

Participants for the listening sessions were recruited using various communication vehicles identified during a previous stakeholder analysis. Information about the listening sessions were announced approximately every two weeks from September 2016 through January 2017 by way of direct emails to over 500 individuals identified during the stakeholder analysis; direct emails to

persons choosing paper maps placed nearly twice as many markers as the internet survey participants. Despite the differences in demographics and mapping intensity, the places of importance mapped by the two sub-groups, and the reasons provided for their importance, were similar.

media and elected officials; press releases made by the Bureau of Land Management; word-of-mouth and website posting from local groups, such as Friends of Browns Canyon; as well as featured in media outlets, such as local newspapers, agency websites, and social media sites. Posters were also placed in key hubs in neighboring communities. Six meetings were held in both rural mountain communities and urban settings, resulting in 133 participants (Table A). The number of participants attending ranged from 6 to 49 per meeting, with an average of 22 participants. The largest meetings were held in Salida and Buena Vista, which combined made up nearly two-thirds of respondents.

Table A. Listening session locations and participation

Listening Session Location	Session date	Number of participants
Leadville	October 17, 2016	11 (8%)
Denver	October 27, 2016	19 (14%)
Colorado Springs	October 27, 2016	10 (8%)
Salida	October 29, 2016	49 (37%)
Cañon City	October 29, 2016	6 (5%)
Buena Vista	November 15, 2016	38 (29%)
Totals		133 (100%)

Facilitators from Consensus Building Institute and members of the planning team facilitated the meetings. Session participants gathered around small tables that included a volunteer table facilitator and a table scribe. Two large color maps (33 x 22 inches) were placed on each table. One was a blown up version showing BCNM in detail, with major trails, roads, and landscape features, while the second showed the BCNM in the context of the surrounding area of Chaffee County. (See Figure 1.) Each person received a mapping booklet, a highlighter pen, and matching colored dot stickers. [For a copy of the maps, see Appendix A.]

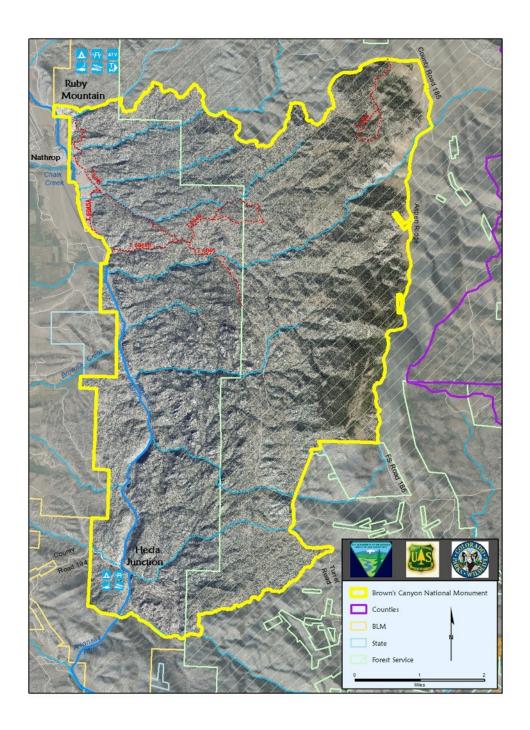


Figure 1. Base map used for Browns Canyon National Monument

Sense of Place. The listening sessions featured three sets of exercises. [For a copy of the listening session protocol, see Appendix B.] The first was an open round-robin discussion about the connections people at the table had with the area and the 'sense of place.' Participants introduced themselves and were asked to describe how they established their connections or ties with Chaffee County and Browns Canyon. They also were asked to talk about what aspects of the monument were particularly important to them. As participants spoke, scribes noted the number of years each person had lived in the area and their gender. This exercise lasted about 20 minutes.

Resource Interactions. The second activity was a mapping exercise where participants marked five resource interactions on maps, using colored markers provided. Participants were asked to identify up to 5 areas in Browns Canyon National Monument that they visit, use, or interact with in some way. Each participant situated at the table used a different color marker. In an accompanying mapping booklet, they answered follow-up questions about the frequency of visits to those sites, the seasons of visits, and prominent landscape features or qualities that attracted them to that area. They also described what activities and resource uses they engaged in for each of those locations. This activity required 30 minutes.

Special Places. The third activity posed the question 'What are the three places in Browns Canyon National Monument that are most special or significant for you?' For each place indicated, participants were asked why that destination was important and to assign at least three values from a list of 17 landscape values provided. They also were asked to talk about changes observed in those locations. Participants placed a dot sticker on the BCNM map for each destination noted. This activity required 30 minutes. After the mapping session, table groups gathered for facilitated discussions about their special places and the challenges and opportunities related to management of those places.



Online listening session

The online listening session was designed to provide an opportunity to engage people who could not attend a community listening session as well as non-local stakeholders who value the BCNM. The online mapping application was designed for this project by TierraPlan, who hosted the online content on its website. Links to the online listening session were provided on websites of BCNM and also Friends of Browns Canyon. The online link was open for three months, from October 2016 to January 2017. There were 178 respondents to the online listening session. (See Table B.) Of those, 39 percent came from the communities along the Arkansas River Valley near Browns Canyon. Another 12 percent came from other rural communities in Colorado and 25 percent came from the urban Front Range, including the Denver Metropolitan area. The online session also attracted 25 participants from out-of-state.

Table B. Online participants by area

Zip Code Zone	Community	Number of Online Participants
Local Arkansas River Valley		69 (39%)
	Salida Only	20
	Buena Vista Only	35
Other Rural Colorado		22 (12%)
Urban Front Range		44 (25%)
	Denver Metro Only	21
	Northern Front Range Only	8
	Colorado Springs/Pueblo	12
Out of state		25 (14%)
Online Listening Session Total		178

The online listening session was designed to closely resemble the community-based protocol to the extent feasible. Sense of place questions were asked in an open-ended format where participants typed responses. For the mapping exercises, online respondents could note up to 5 resource interactions that were important to them and then described the activities they took part in at the destination, the frequency and seasonality of visitation, and the special features that attracted them. For the special places exercise, participants noted 3 places using digital dots and then described what made these places special, assigning a maximum of three landscape values (from a list of 17 values) to those places. Open ended questions asked participants to reflect on changes observed in their special places and management challenges perceived. The online listening session required approximately 20 minutes to complete.

Limitations in data interpretation

Care should be taken in interpreting data from the maps. These data were gathered at public listening sessions both in community settings and online. They were not gathered using a random household survey to ensure that they are representing a random sample of Coloradans or even Chaffee County residents. Results reflect the views of those who turned up to public

meetings or online forums and thus are likely to be those with high interest or stake in the management of the Browns Canyon National Monument. Thus, these results cannot be generalized to the entire population and should be treated as such.

Data Entry and Analysis

After data collection, we manually digitized the resource interaction polygons and special places points using ArcGIS 10.4 software. Features were digitized into our database to replicate the shape, size, and location indicated by each participant on the tabletop maps. Resource interaction polygons and special places points were stored in separate file geodatabase feature classes. Online session spatial data were treated similarly as the community session spatial data. Online session participants had the option to draw resource interaction areas as polygons or as points. The shapes and locations users drew for the resource interaction areas polygons, points, and special places points were converted from the online GeoJson format into an ESRI geodatabase. Attribute data about those shapes were imported from CSV files into geodatabase files. To see more detail about data entry, processing, and analysis, see Appendix C).

Resource Interaction Area Density Analysis

The resource interaction area polygons from the community and online sessions were combined and overlaid to create a composite density map to identify areas where resource interaction areas were more highly concentrated. Density is represented by a color ramp ranging from low to high. Areas that have been mapped less frequently (fewer overlaps) are represented by lighter color tones, and areas that have been mapped more frequently (more overlaps) are represented by darker color tones. Areas that have not been mapped at least two times have been left unshaded.

Special Places Density Analysis

The special places points from the community and online sessions were combined and analyzed to create a kernel density map to identify areas where special places were more highly concentrated. The kernel density is determined by calculating the number of points that fall within specified search radius from each point. The number of points per square mile was calculated within the search radius for each point, then all search radius values were overlaid into a composite surface to show differences in the intensity of use. Special places that have been mapped less frequently (less special places per square mile) are represented by lighter color tones, and special places that have been mapped more frequently (more special places per square mile) are represented by darker color tones. An area was only considered for the density surface when two points are within the search radius. Areas that were not calculated with at least two special places points have been left unshaded.

Zip Code Analysis

We also wanted to explore any potential differences in land use and value patterns based on participants' residence. We derived four zip code zones from the 103 residential zip codes provided by the total 311 community and online participants (Appendix D).

Results

Listening Session Participants

Listening session participants were predominantly male (69 percent) with a similar distribution in both the community and online sessions (Table C). This ratio mirrors gender trends in visitation

rates to the Pike San Isabel National Forest in 2011, which show that 69 percent of forest visitors were male (National Visitor Use Monitoring Program 2011).

Table C. Summary of participants by gender

Session Location	Male	Female	Unknown	Combined Total
Community Sessions	91 (70%)	39 (30%)	3	133 (100%)
Online Sessions	122 (69%)	56 (31%)	0	178 (100%)
Combined Totals	213 (69%)	95 (31%)	3	311 (100%)

One difference between the community listening sessions and the online sessions was how age and years of connection to the community were measured. In the community listening sessions participants were asked about the number of years they had lived in the area. In the online session, participants were asked their age and the number of years they have been visiting the area. These measures are not comparable, but taken together, they paint a picture of the characteristics of community and online participants. For community sessions, the average number of years lived in the area was 18.2 years, with a range of 0 to 60 years (Table D). One fourth of community participants had lived in the area 5 years or fewer. A total of 106 (out of 133) responded to this question about years in the area.

Table D. Community listening session: Years lived in the area

Years lived in area	No.	Pct.
5 or less	27	25%
6 to 10	14	13%
11 to 19	19	18%
20 to 29	21	20%
30 to 39	14	13%
40 or more	11	10%
Total	106	

Ages were provided in the online sessions. The average age of online participants online was 51 years, with a range from 18 to 83 years (Table E). There was a fairly even distribution across the age categories; however, relatively few participants online were under age 30. More than 56 percent of respondents were 50 years or older.

Table E. Online listening session: Breakdown by age

Age Category	Number	Pct.
Less than 30 years	13	7%
30-39 years	32	18%
40-49 years	23	13%
50-59 years	45	25%
60-69 years	31	17%
70 and over	25	14%

Online participants also were asked how many years they had been visiting Browns Canyon. The average number of years was 20 years, with a range of 0 to 77 years (Table F). Overall, familiarity with the Browns Canyon region was very high, although 9 percent had never been there, more than a quarter of participants had 30 or more years of experience with the region.

Table F. Online listening session: Years visiting BCNM

Years visiting area	No	Pct.
None	15	9%
1 to 5	31	18%
6 to 10	15	9%
11 to 15	22	13%
16 to 20	20	12%
21 to 29	19	11%
30 to 39	27	16%
40 or more	21	12%
Total	170	

Landscape Connections: Creating a Sense of Place

People connect with the Browns Canyon area in a variety of ways. Participants to the listening sessions talked about their patterns of visiting the Monument, the seasons of visitation, as well as their connections and history with the broader landscape. They also shared their thoughts about what makes Browns Canyon a special place and the unique features that attract them.

Visitation

Visitation to Browns Canyon National Monument was measured in two ways. First, listening session participants were asked overall how often they visited Browns Canyon (without reference to a particular place). There were some differences between community listening sessions and online participants (Table G). For those attending community listening sessions, 30 percent visit at least once a month, compared to 18 percent for those who participated online. A fair number of participants (8%) were not regular visitors to the Monument.

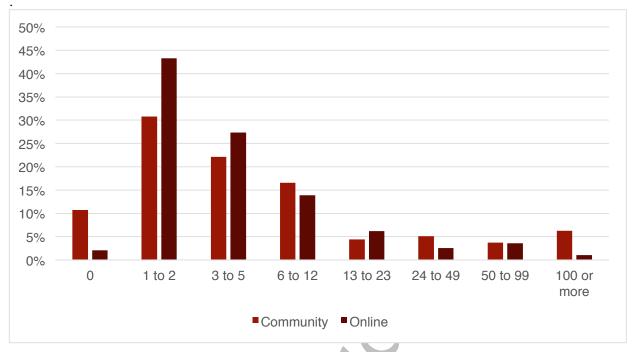
Table G. Visits to Browns Canyon National Monument

	Community		Online	
	Sessions		Session	
Frequency	No	Pct.	No	Pct.
Once a week or more (40 times per year or	22	17%	13	7%
more)				
1-3 times per month (12 to 39 times per year)	16	13%	20	11%
7 to 11 times per year	19	15%	17	10%
4 to 6 times per year	21	17%	46	26%
1 to 3 times per year	30	24%	51	29%
Less than once per year or never	10	8%	15	8%
Unknown	9	7%	16	10%
Total	127		178	

Another way to examine the frequency of visits is by looking at the specific places that were identified on the maps. When mapping resource interactions, participants were asked to identify five places in or near Browns Canyon National Monument that they often visit or use. For each place noted, they indicated how many visits per year they made to this particular area. We found that participants in the community sessions visited places an average of 23 times per year (about twice per month) compared to online participants, who visited 8.2 times per year, on average, which is less than once per month.

Figure 2 compares visitation between community and online participants. For both groups, the majority of places were visited once or twice per year, but the proportion of visits in this category was higher for online participants. Interestingly, a high proportion of community participants indicated that they visited the monument 100 times per year or more, which is about twice weekly. Overall, those who attended the listening sessions held on-site had greater familiarity with Browns Canyon than their online counterparts.

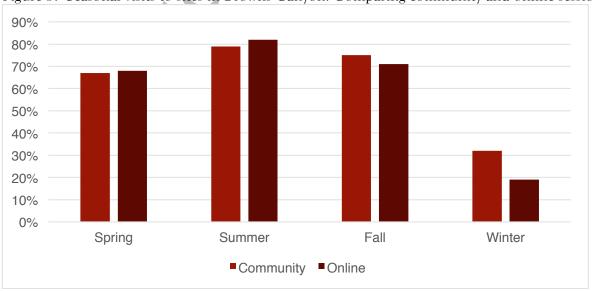
Figure 2. Annual visits to sites in Browns Canyon: Comparison of community and online sessions



Seasons

We examined all places where participants identified resource interactions. For each place mentioned, respondents indicated the seasons that they visited this particular place. More than one season could be mentioned. Community participants mentioned 429 total places, while online participants identified 194 places (Figure 3). Similar patterns were observed with predominant visits being in the summer season. Community participants were slightly more likely to visit in the fall season and far more likely to visit in the winter months.

Figure 3. Seasonal visits to sites in Browns Canyon: Comparing community and online sessions



What is your relationship to the greater Browns Canyon Area?

Listening session participants were asked to describe their connections, ties and history with the Chaffee County and the Browns Canyon area. For community listening session participants, this question was asked in a round-robin format, with each participant at the table telling their story. Online participants talked about their ties with the area using an open-ended prompt. The question revealed rich and diverse relationships with the area, with some extending back four or five generations. We collected 295 personal accounts in total.

Using Tagul software, we created a Word Art depiction of the full set of qualitative responses to the question, "What is your connection to the Browns Canyon area?" (Figure 4). The figure was created by entering the complete list of quotations into the program and generating a diagram that produces words in sizes proportional. In this diagram 'raft,' and 'hike' were prominent themes.



Figure 4. Word art depiction of collective responses to, "What are your connections to the Browns Canyon area?"

Our study team coded and analyzed the individual stories to reveal prominent themes. Below, we identify seven major themes identified and provide examples of some of the ties.

Multiple Generations of Grazing in Chaffee County

Several participants talked about their long history in the area and their family's dependence on the land, especially for grazing. Many described four or five generations of ranching and cattle grazing. A few noted in their descriptions that the prospect of a Monument designation was an unwelcome change to their livelihood and fought against it. Some note the growth in visitation.

"My family came in the 1870s and settled a ranch in 1889. We ran cattle, did some logging. We used to hike the Old Stage Road when it was still in use. I am the fourth generation in my family to ranch."

"My family has lived here for 100 years cattle ranching. I'm fifth generation."

"I was raised in the area through ranching and grazing. I use the Arkansas for irrigation. I did not want to see the Monument designated."

"My family homesteaded the land right next to Browns Canyon. We have historical grazing rights." "I'm a fourth generation permittee (USFS & BLM). A lot of changes have increased the number of people in the area. Bike riding, motorcycle, horseback. These activities have shut down at lot of foot access. The Turret Road re-opened."

"My great grandmother moved to Turret in 1925, and 4 generations of my family have lived here since then."

Long-time Residents

A number of participants had lived in the area for many years or all their lives and while they were not involved in grazing, their families owned businesses or worked in other industries. These residents talked about their connections with the landscape through their activities as well as their memories and emotional ties. Many described a wide array of activities that connected them to the area, including horse trail riding, motorcycling, camping, fishing, hunting, and hiking. Some talked about their ties to the local economy and the importance of Browns Canyon to the economic future of the area.

"I have lived here my whole life, hunt fish hike explore the area, and getaway from people there." "Rafting, fishing, hiking, volunteering, family connection, RAC. Helped with the creation of the national monument. Lots of changes and improvements with access."

"I am Salida born and raised. Came back to the area for a job. Remembers putting in at Hecla and not seeing anyone. Hunted and trapped in the winter. Fishing, wildlife resources. My history is tied to humans (mining, railroad). Enjoy Railroad Gulch."

"Grew up here, spent lots of time in Browns Canyon growing up. Hunting, fishing, hiking, hunting gems at Ruby Mountain. We need to balance protection with ensuring that current uses can continue."

"I lived six miles west for 65 years. Have fished in Brown's Canyon approximately 250 times."

"I live here in Chaffee County. I have rafted, hiked, fished and gold prospected the area."

Has a jeep rental business. Has been here for 25 years. Lives on Deer Trail. Has spent lots of time in the monument. Has applied for jeep permit in areas around the monument. "This is my livelihood-important also to grazing and mining. Don't over-do-it, but need access for these interests."

Whitewater Guides

A large proportion of participants in the listening sessions had ties to Browns Canyon through rafting and the rafting industry. Of the 295 narratives, 77 (33%) had some mention of rafting or guiding. The guiding industry attracted many skilled outdoor enthusiasts to the region since the 1970s and many of the guides stayed on to make Chaffee County their home. Others moved to urban areas, but maintain strong ties to the area – frequently returning for outdoor recreation or to visit friends.

"I moved here in 1976-started an outfitter business-ran it for 25 years. Had strong economic interest. This is one of a few areas in the U.S. where you can float through the river and see a wilderness area. We don't have enough wilderness-protect lands as they've been. This is important to me; I believe in proclamation."

"I am a raft guide for [local company], and I paddle the Arkansas River at least one day of every month. Originally I came here a few times as a kid growing up to raft, then decided later to get away from rafting guiding in Idaho and I came here."

"I spent my childhood in the Buena Vista area, but didn't really know Browns Canyon until I started taking rafting trips in middle school. After I graduated from college, I became a raft guide and really began to know the Browns Canyon area."

"Raft guide/fly fishing occupation (over 700 trips through BCNM). Met and married my wife here, who is also a river guide. A lot of connections to mention in a short time...remoteness, beautiful. Love that so many come to the BCNM to do half day or full day rafting trips. They can be in a wilderness setting, but get home at night. It is a big economic device."

I did a lot of canoeing/kayaking in BCNM in the 80's. Hanging between the rapids with my mouth open. Hiked out of Ruby, Turret, retired here for the river. "Snow on the mountains in the spring...I remember looking at it, and saying WOW".

Amenity Migrants

Another subset of participant were relatively new to the area and had been attracted by outdoor recreation opportunities, access to nature, and the beauty of the area. Some in-migrants were newly retired, while others came to start businesses.

"I've lived in Salida for about 6 years now, and Browns Canyon has always been a draw for me. I'm a climber, so from the very first day I drove down Hwy 285 and saw the beautiful landscape of granite domes, I was hooked."

"I moved to Colorado Springs after retirement. I came to Browns Canyon for ice climbing. I bought a business in Buena Vista."

"I came here from Denver in 2000. Loved the unique wild feeling of the place. I started doing whitewater, but also loved hiking. Joined the citizen taskforce for 4-mile management plan. Part of the friends group focused in conservation and sustainable management."

"I came here first as an 11-year old on a rafting trip. I moved here in 2013 and am involved in the rafting industry in BCNM. I experience what it's like in nature. The moose, the bighorn sheep. It's important to educate people that the monument is part of their heritage. Standing out in the water in the winter, low water levels; it is so serene, so peaceful. And it's warm! It is both remote and accessible."

"I had been visiting the area for 50 years; now I'm a new resident. I go gem collecting with grandkids at Ruby Mountain."

Former Residents and Seasonal Homeowners with Strong Connections

Several participants, particularly those living in the Front Range cities, had roots or ties in the Chaffee County area. They had moved out of the area for work or other reasons, but often still had family in the area and made frequent trips back. Some had been seasonal residents, often as guides. Others identified themselves as owners of second or weekend homes. This group typically participated online or turned up at the Denver or Colorado Springs sessions. They mentioned frequent visits to the Browns Canyon area for recreation and visiting.

"I work with the National Parks Service and have had family in Salida since 1886 for mining. Was a former river guide in Browns Canyon National Monument; grew up in the area."

"I grew up rafting with my family on Browns Canyon and then worked as a raft guide for seven summers on various sections of the Arkansas."

"I grew up there and moved away, but I continue to come back."

"I live and work in the area in the summer."

Frequent Visitors

Another group who participated in the sessions were people who lived outside Chaffee County, but were frequent visitors to the area. Many lived in the Denver area or other Front Range communities and found a special connection to Browns Canyon.

"I've visited the general area many times. The views from highway 285 of the river valley, rock outcrops and forested ridges to the east are splendid. I've also driven the Aspen Ridge forest road along the eastern boundary of the Monument."

"I hike and explore the greater Browns Canyon Area via foot travel. I came to know this area through rafting Browns Canyon and exploring the foothills above Browns Canyon."

"I started hiking in the area in 2014 and kayaking in the area in 2016. The river valley surrounded by mountain vistas provides a majestic scene for any outdoor activity."

"I began kayaking Browns Canyon during the summer of 1978 and usually return to kayak this wonderful resource a few times each season."

"I have enjoyed hiking, camping, river rafting, and fly fishing there. I have spent quality time with friends and family enjoying scenic places and have met great people who live and work there."

Wilderness Advocates

A fair number of participants in the sessions were engaged to advocate for the designation of the Monument or further designation of wilderness in the area. Some of these participants had visited Browns Canyon as part of a field monitoring effort or for recreation. Others had only read about the Monument and had never been there. About 9 percent of participants fell into this category. Most were advocates in favor of the Monument designation and participated in formal organizations. Some were local residents and newcomers who favored designation.

"I used to ride from Turret to the closure at the WSA boundary. I fought to keep this from becoming a Wilderness Area. I have not been in since its designation as a National Monument."

"I've never been to the monument. I'm interested in protection and learning more."

"What drew me was protection: ecological value, cultural sites, lithic sites. Interested in protection of the area."

"I read about the Monument in a Denver post article. I have never visited, but I love scenery."

"I got to know the area through volunteer connections – mapping roadless lands for Rocky Mountain Wild."

There were many other stories told about the diverse connections with Browns Canyon and its environs and textured relationships with the area that cannot be easily categorized or captured in a discrete heading. The Monument's compact nature and diverse features and settings mean that many different types of people have strong ties to the place. For example a strong cadre of roughly 9 horse enthusiasts representing Backcountry Horsemen attended the sessions and participated online to share their desire for maintained trails to accommodate equestrian use. There were several (about 10) people who had a strong interest in gems and rock-hounding and were especially interested in Ruby Mountain. Another special interest group with strong participation were the 27 kayakers, who predominantly engaged with the online session. In addition to these special interests, others who participated in the listening sessions included adjacent landowners, small business owners, public officials who had worked in the area, retirees, volunteers, and newcomers.

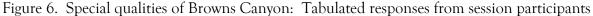
What makes Browns Canyon Special?

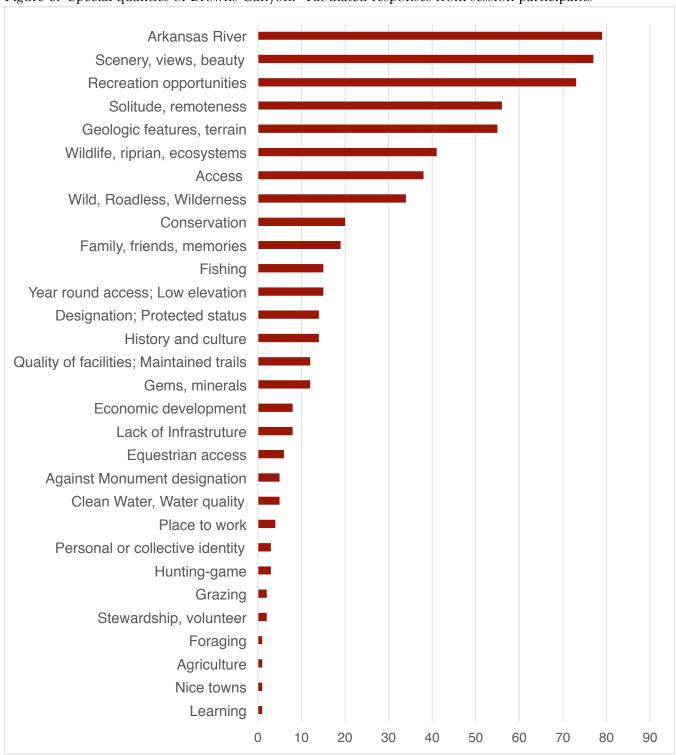
Listening session participants were asked the question, "What is special to you about Browns Canyon?" More than 260 responses were provided in an open-ended format, with some writing a few words and others a full paragraph. The visual description of responses of all listening session participants is shown below (Figure 5). This Word Art diagram was created using Tagul to tally the number of words that repeat in the 260 responses. The diagram shows the importance of the river, as well as access and hiking.



Figure 5. Word art diagram of responses to the question, "What makes the Browns Canyon area special?"

Members of the research team coded these responses to capture the variety of sentiments expressed. One response may have elicited multiple codes. Tabulated results appear in Figure 6. This figure alone, while illustrative, does not begin to capture the richness of stories and responses about the area. We highlight several key themes below and provide a sample of quotations to reflect the themes.





The River. The star of the Browns Canyon area is the Arkansas River. Many mentioned the beauty of the river, while others focused on features important to whitewater recreation enthusiasts, boaters, and anglers. Many discussed specific rapids and features that stood out. Another key point was made about the accessibility of the river to different skill levels, noting that the river is an ideal place to teach and learn whitewater skills and introduce newcomers to the sport.

"Every wilderness area is important to me and Browns Canyon most importantly because it is close and has one of the most beautiful rivers in the world within it."

"Not only is it a beautiful river canyon it allows a boater to exercise his or her thirst for the outdoors. The ease of access is also a plus."

"I love the friendly rapids, and primarily that you're away from the highway. The canyon is gorgeous!"

"The River. Very unique river valley with incredible mountain and canyon scenery, and amazing rock formations."

The Views. The scenic qualities and natural beauty of the area were mentioned with great frequency. In particular, participants commented on views of the nearby Collegiate Peaks as well as the rock formations in the canyon and gulch areas.

"It is rugged mysterious and a giant maze or puzzle. It has the absolute best views of the valley. The drier climate makes it year round accessible. The scenery in the canyon is unbelievable. The wildlife and flora are striking."

"The overall natural beauty is unparalleled. Amazing diversity of ecosystems and geology, abundance of wildlife, a quiet wilderness solitude, and of course you just can't beat the views! Honestly, those are all amazing but really the sense of solitude."

Accessible Solitude. Very often participants talked about how the Browns Canyon area provided opportunities to get away into wild, remote settings that were easily accessible.

"The wilderness aspect. Although it's no more than a few miles from any road, the canyon isolates the area, and almost any river trip between October and April is one where you can be guaranteed solitude."

"It is a well-managed, awe-inspiring location that is perfect for getting young people who do not have access to the great outdoors out to experience the wonders of nature."

"Remoteness in proximity to human population."

Don't Love it to Death! The need to balance public access and use with opportunities for solitude were mentioned frequently. Currently, the area is viewed as a low-key attraction, with a sprinkling of visitors. Many were concerned about future crowding and continued overuse that would impact ecosystems and alter the social environment.

"It's a great mix of being accessible without being overrun - well preserved."

"It is my favorite place in the world. I am very protective of it. I am concerned people will love it to death."

"The fact that it has been a wild place not inundated with hoards of people, such as the Collegiate Peaks Wilderness area, for example. The land within the Browns Canyon N.M. has been spared the impacts from too many humans."

Trails and Infrastructure. Participants liked the 'primitive' recreation features of the Monument. Some were concerned that the new Monument designation would attract more visitors to the area, and that agencies would respond with improvements to facilities, which would in turn attract more visitors. Some types of recreation enthusiasts wanted to see more trails suitable for their use (motorized, equestrian). While some desired trail access deep into the Monument for backpacking and climbing, others preferred the minimal trail system, which allowed bush-whacking and exploration off-trail.

"Pushing for human equality/inclusiveness. Push for National Parks to maintain both a primitive status and public accessibility. 'Cultural equity.' The rafting culture: adrenaline-type people and actions are being translated into the monument."

"Appreciate the aesthetics, ease of access. I don't want the area to be more developed or to have easier access. I like the limited access."

Pro-Monument and Anti-Monument Sentiment. A range of views were expressed, with some participants thrilled about the Monument designation and the protection of the Browns Canyon landscape for future generations, and others believing that the Monument status restricts types of use and limits economic opportunity as well as infringing on personal freedom.

"Since the designation, many of the activities my family has enjoyed have come to a standstill. We used to collect obsidian and garnets from Ruby Mtn. We also prospect for gold along the Ark. From what I understand it is illegal to do any prospecting."

"The scenic beauty, remote backcountry areas, cultural significance, wildlife viewing opportunities, its special significance as a National Monument. A place for personal solitude."

The Full Package. In many cases, the combination of scenery, accessibility, recreation opportunities, geologic features, and historic sites made Browns Canyon a favored destination. Because the area is situated at low elevation it is accessible for most of the year. This made it a nice destination for winter recreation.

"It is one of the few places left in Central Colorado where the rugged terrain and lack of trails, people and development permit solitude and primitive experiences year round."

"The overall natural beauty is unparalleled. Amazing diversity of ecosystems and geology, abundance of wildlife, a quiet wilderness solitude, and of course you just can't beat the views! Honestly, those are all amazing but really the sense of solitude."

Special Features

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Session participants were asked, 'What unique features draw you to Browns Canyon that you don't find elsewhere in the region?' Results echoed themes associated with the previous question about what makes Browns Canyon special. For the community listening sessions, participants selected from a list of 11 special features and were allowed to pick as many as desired.⁵ They also could select an 'other' category and add their own response. For the community sessions, the most common additions in the 'other' category were 'grazing' and 'solitude.'

⁵ The original 11 categories were: recreation opportunities, scenery & views, river access, unique geology, wildlife/ plants/ecosystems, fishing opportunities, ease of access, cultural & historic, memories/stories/traditions, prime hunting areas, and harvesting resources.

In the online sessions, the question was open-ended and participants offered their own ideas. The research team coded each response to match the 11 original categories and added several new categories, including 'wild, roadless areas,' and 'gems, minerals, crystals.' Figure 7 shows the combined results below for both the community and online sessions.

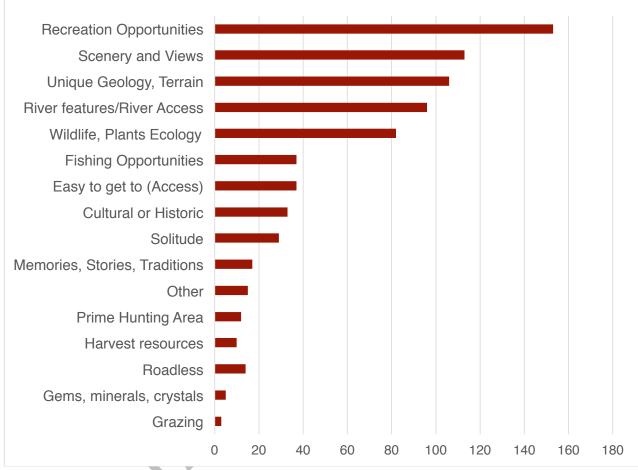


Figure 7. Special features attracting people to Browns Canyon National Monument

Recreation opportunities were the most prominent feature mentioned, followed by scenery, and geology, namely the rock formations or hoodoos. There were some interesting differences in the responses between community and online participants. For example, several participants attending the community sessions mentioned grazing as well has hunting, but neither were mentioned in the online responses. Also, no online participants mentioned the value of the Monument for sharing stories, memories or traditions through generations, whereas this was often noted by community participants. Online participants emphasized solitude, remote opportunities and wilderness more than community participants.

Participants spoke enthusiastically about the many features enjoyed in Browns Canyon. Table H provides a sampling of responses to this question from the online participants. For some, the Monument offers very specific activities, such as white-water rapids, or cultural heritage sites. For others, the combination of outdoor recreation activities with scenery, unique geology, and wildlife makes the area special. Frequently mentioned was the accessibility of Browns Canyon to

neighboring communities and to urban areas of the Front Range. The area offers a variety of activities in a unique environment that is accessible to people.

Table H. Sample of participant responses about Browns Canyon's special and unique features

	articipant responses about Browns Canyon's special and unique features			
Feature	In the words of Browns Canyon visitors: Sampling of online responses			
Recreation	"Rafting, hiking, rockhounding, hunting."			
Opportunities	"The Arkansas River infinite landscape of granite domes to explore,			
	Stafford/Railroad Gulches and the spectacular climbing, and really just the			
	unexpected challenge of just how to get someplace in there."			
	> "12 miles of friendly, yet challenging Class 3 whitewater, plenty of great, free			
	campsites for any size of party. The views, the gradient. There is a lot to like."			
	"The hiking, wilderness, exploration and whitewater!"			
Scenery & Views	"The ability to view the Collegiate Peaks from high up across the valley. The			
	river and the rock formations."			
	"Rapids, outcrops, particular views of the Collegiate Peaks, low elevation			
	wilderness, and quality piñon woodlands."			
11 · · · · · · · · · · · · · · · · · ·				
Unique Geology &	"I enjoy Browns rugged drainages, its wild segments of the Arkansas River,			
Topography	rock formations in the railroad gulch and reef areas."			
	"The rugged terrain is accessible most of the year. I have kayaked Browns			
	many times. The granite outcrops are beautiful amidst the forest and sma			
	streams feeding the river."			
	"Colorado has many beautiful places for hiking. The Browns Canyon has			
	incredible rock formations that remind me of areas in Utah."			
	*Rock outcropping not seen on the west side of the valley where I usually			
^	hike."			
The Arkansas River	"Continuous rapids, riverside camping, and it is enjoyable at such a range of			
	flows."			
	"The mix of fun and relatively simple whitewater with the beauty of the			
	canyon create an environment unique in even amongst Colorado River."			
	"Uninterrupted public access to miles of river corridor.			
Wildlife, Plants &	"Juniper trees; the biodiversity of cacti, evergreens, and wildflowers."			
Ecology	"Warm drier steppe or desert region, lower montane ecosystems."			
	"The combination of river, piñon and juniper, views of the Sawatch and			
	granetic gneiss."			

Fishing	"Proximity to Denver, great whitewater and fishing."
	"Rafting through a canyon and not seeing any other kind of outside
	transportation. As well as amazing fishing."
	"Stunning area. Clean and plentiful water. Great boating and fishing."
Access/Convenience	"The isolated canyon is very unique. A wilderness setting that's still fairly close to Buena Vista and Salida. The history through the canyon, dynamite caches, railroad remains."
	"Beautiful canyon, medium whitewater, convenient for quick overnight trip from Denver."
	"Combination or scenery, wildlife, rafting, fishing, hiking, aspen viewing in relatively small and accessible area."
	"It's such an amazing and easy way to get away on the river for a little while
	whether it's a just a quick couple of hours or a couple days."
Cultural &	"I like the old mines and mining buildings and the history of the old road."
Historical	"Wild-west mining history."
	"Landscapes, mining, and railroad heritage."
	• (7)
Solitude/Wild	"The sparse and few visitors plus the lack of developed, mapped, and
	advertised trails and trailheads are THE MOST VALUABLE features of the
	land within the "Browns Canyon National Monument".
	"Close canyon with good fishing opportunities, great scenery, no cars, few
	people. By hiking only a quarter mile, you can feel like you are in Utah, with
	the red rocks up Railroad Gulch. Close by gorgeous river canyon easily
	walkable. Miles of wildness in the wilderness area."
	> "Quiet no people here."

Resource Interactions

Participants in the listening sessions were asked to identify five areas or places in or around the Browns Canyon National Monument that they visited or used on a regular basis (Figure 8). People used markers to draw on maps and label their sites. For each area noted, they were asked how often they visited, what seasons they came and what activities they engaged in at these locations. They also were asked to note features in these sites that attracted them and changes they had observed over time. Participants altogether mapped 623 resource interactions areas (an average of 2 per person). Community listening session participants mapped 429 resource interactions areas (averaging 3.2 per person), while online participants mapped 194 (an average of 1.1 per person).

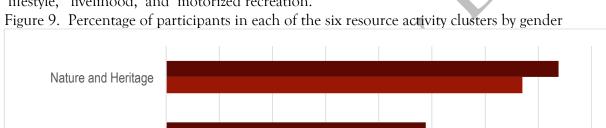
Figure 8. Questions and follow-ups for resource interactions mapping

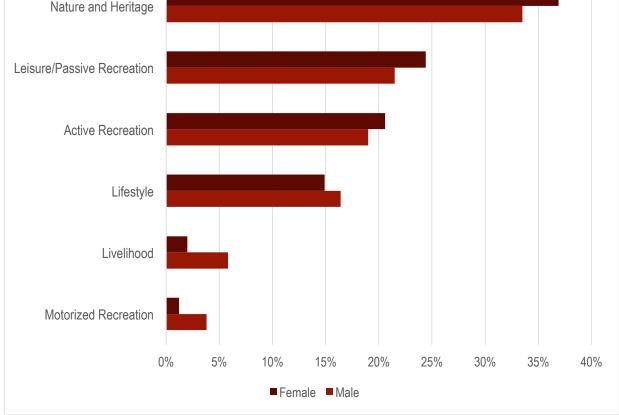
Place #1 What is this area called?						
1.1	Seasons visited:	S	pring Summer	Fall	l Winter	
1.2	1.2 How often do you visit this area in a typical year?times/year					
1.3	1.3 Interactions: What do you do in this area? Activities, hobbies, practices Check all that apply.					
NATU	JRE & HERITAGE	LIFES	STYLE	LEIS	JRE	
	View nature		Fish		Scenic Drive	
	Photography/Art		Hunt		Camp	
	Watch wildlife		Gather or Forage		Relax	
	Bird watching		Collect gems/rocks		Picnic	
	Outdoor education		Horseback riding		Family	
	Visit historical site		Stewardship/volunteer		Social event	
	Cultural traditions		Spiritual .		Resort	
	Science		Therapeutic/health			
LIVEL	LIVELIHOOD ACTIVE RECREATION MOTORIZED					
	Guiding		Raft/kayak/canoe		Motorcycle	
	Mining		Hike/walk		Off-highway vehicles	
	Grazing		Backpack		Motorized boating	
	Work		Rock climb		Snow machine	
	Forest products		Bike			
	Firewood		Ski/Snowshoe		Other:	

Resource Activities

A list of outdoor activities and resource uses was provided to remind people of the many possibilities. Collectively, 641 places were mapped. Resource activities were grouped into six clusters: nature and heritage, lifestyle, leisure, livelihood, active recreation, and motorized recreation. A total of 39 activities were listed. On average, people in the community listening sessions marked 8.3 activities, compared to 6.4 activities in the online sessions. We found some differences between the number of activities selected between those marking points (average 5.5) and those marking larger polygons (average 7.5), which suggests that larger areas may be associated with a greater diversity of resource activities.

We explored the proportion of male and female participants who indicated outdoor activities in each of the six cluster areas (Figure 9). Overall, the most prominent cluster was 'nature and heritage,' (wildlife viewing, historical, cultural, education), followed by 'leisure' (driving, camping, relaxing), and 'active recreation' (hiking, rafting, biking, climbing). We note that female participants were more likely to engage in the top three activities, while male participants noted 'lifestyle,' 'livelihood,' and 'motorized recreation.'





The top 20 specific outdoor activities appear in Table I. Not surprisingly, several of the top activities were associated with nature and heritage, including 'view nature,' 'watch wildlife,' 'photography/art,' and 'bird watching.' The most prominent active recreation activities mentioned were hiking and rafting and whitewater activities (raft/kayak/canoe).

Table I. Top 20 activities mentioned for all resource areas mapped (n=641)

Rank	Resource Activity	No	Pct.
1	View nature	448	70%
2	Hike/walk	397	62%
3	Watch wildlife	299	47%
4	Photography/art	264	41%
5	Relax	246	38%
6	Camp	214	33%
7	Raft/kayak/canoe	200	31%
8	Bird watching	199	31%
9	Picnic	180	28%
10	Family	171	27%
11	Therapeutic/health	161	25%
12	Outdoor education	154	24%
13	Scenic drive	145	23%
14	Spiritual	144	22%
15	Backpack	128	20%
16	Fish	127	20%
17	Science 10		17%
18	Stewardship/volunteer 108		17%
19	Visit historical site	99	15%
20	Social event	88	14%
21	Guiding	88	14%

NOTE: Results for the complete list of 37 activities appears in Appendix E.

Mapping Resource Interactions

Listening session and online participants were asked to identify up to five areas in Browns Canyon National Monument that they visit, use, or interact in some way (i.e. bird watching, relaxing, rafting, hiking, etc.)—these areas were drawn onto maps. Figures 10 through 17 show the results of the mapping activities overall and broken down into different sub-groups by listening session type (community-based or online), community location, area of residents (Arkansas Valley or other area), by resource activity type, frequency of visits, and season of visits.

About the maps

Participant-drawn resource interaction areas were then digitized as GIS data features. The live listening session and online data were combined and overlaid to create a composite density map to identify areas where resource interaction areas were more highly concentrated.

Density is represented by a color ramp ranging from low to high. Areas that have been mapped less frequently (less overlaps) are represented by lighter color tones, and areas that have been mapped more frequently (more overlaps) are represented by darker color tones. The maximum number of overlaps listed below the color ramp varies between the following maps—for example, between *all* live and online session data versus data from the Buena Vista session alone—because it is dependent on the number of resource interaction areas mapped at each session. Areas not been mapped at least two times were left unshaded.

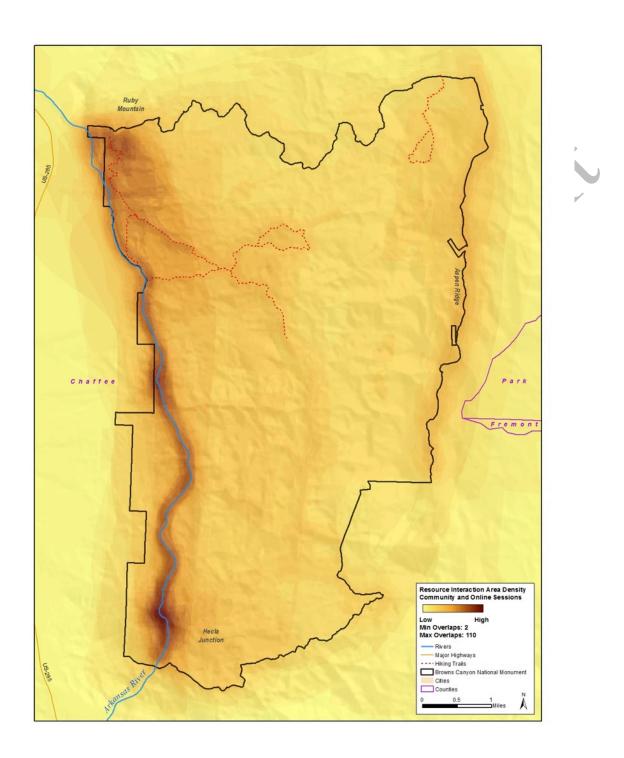


Figure 10. Resource interactions: Online and community sessions combined

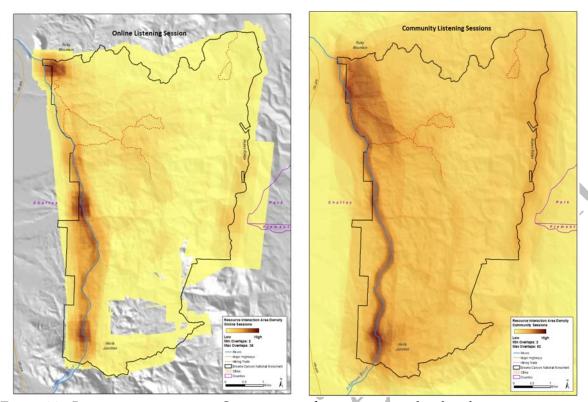


Figure 11. Resource interactions: Comparison of community and online listening sessions

When comparing responses from community listening sessions and online sessions, we observe that use is concentrated along the Arkansas River for both groups (Figure 11). We see more distinct clusters of activity in Ruby Mountain, Browns Creek area, and Hecla Junction for online participants, while community participants more often note activity around Turret and the Railroad Gulch area. Community participants more commonly marked places in the interior of the Monument, particularly in the southern end. Areas near Hecla Junction were more dispersed, rather than concentrated around the trailhead area. Both groups mapped in the Aspen Ridge Road area.

Figure 12 compares community listening session results from Buena Vista, Salida and Denver. We see that the Buena Vista participants have extensive use of the Arkansas River corridor and the Aspen Ridge area. The Salida participants were more likely to identify use throughout the monument, including much of the interior as well as the trails near Hecla Junction, to the south. Since Salida is located at the southern end of the Monument, Hecla Junction is the closest access point for many residents. Meanwhile, Denver participants' use is almost exclusively concentrated in the Ruby Mountain area to the northwest and the Arkansas River corridor.

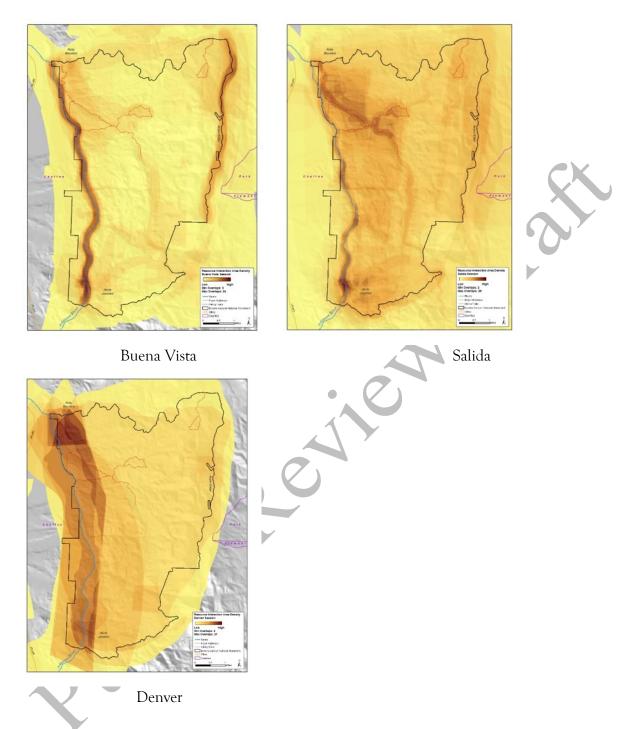


Figure 12. Resource interactions: Comparison between Buena Vista, Salida, Denver sessions

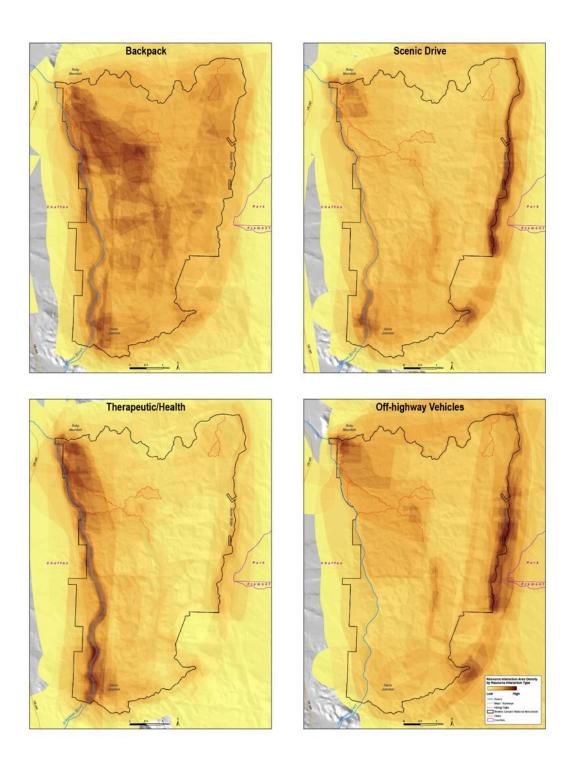


Figure 13. Resource interactions by outdoor activity: Backpack, scenic drive, therapeutic/health, off-highway vehicles

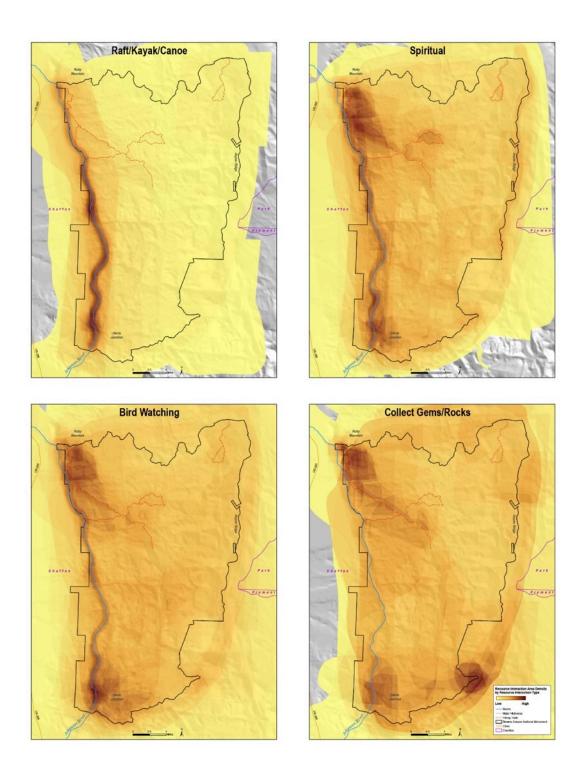


Figure 14. Resource interactions by outdoor activity: Raft/kayak/canoe, spiritual, bird-watching, gems

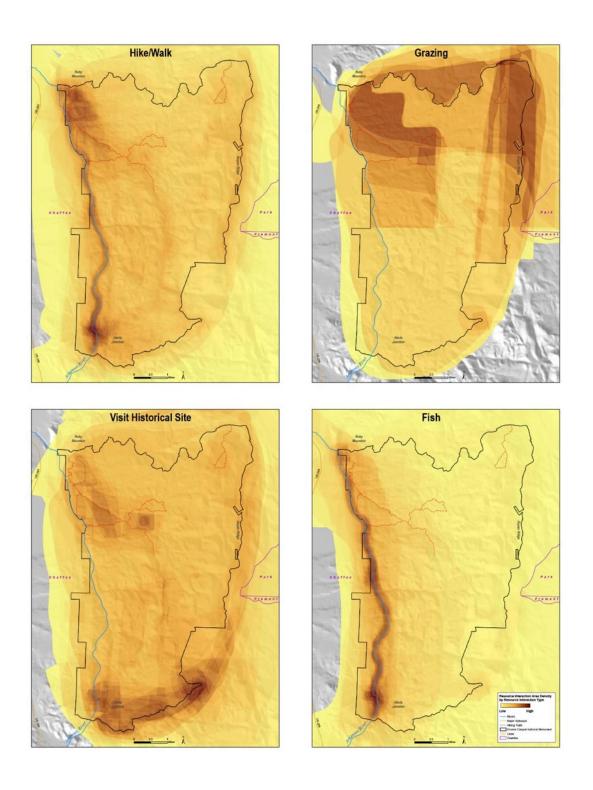


Figure 15. Resource interactions by outdoor activity: hike/walk, grazing, historic site, fish

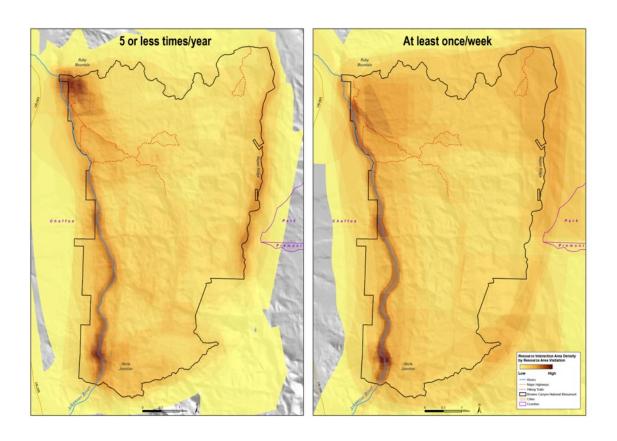


Figure 16. Resource interactions by frequency of visits (all participants)

Figures 13, 14, and 15 compare the density of resource use by individual activity. Figure 13 shows that motorized use and scenic driving takes place along the Aspen Ridge Road, while backpacking is dispersed throughout the Monument. Therapeutic use is associated with the Arkansas River. Figure 14 shows that rafting, spiritual uses, and bird watching are in the canyon corridor, while gem collecting is focused on Ruby Mountain and the Turret region. Figure 15 shows that fishing and hiking are very much concentrated in the river valley, while historical uses are identified with the Turret area and Hecla Junction. Grazing was associated with areas just north of the Monument.

Figure 16 compares areas visited based on frequency. We see that high-frequency visitors to the Monument are more apt to visit the Arkansas River, where less frequent visitors are concentrated at Ruby Mountain, Aspen Ridge Road, and the river.

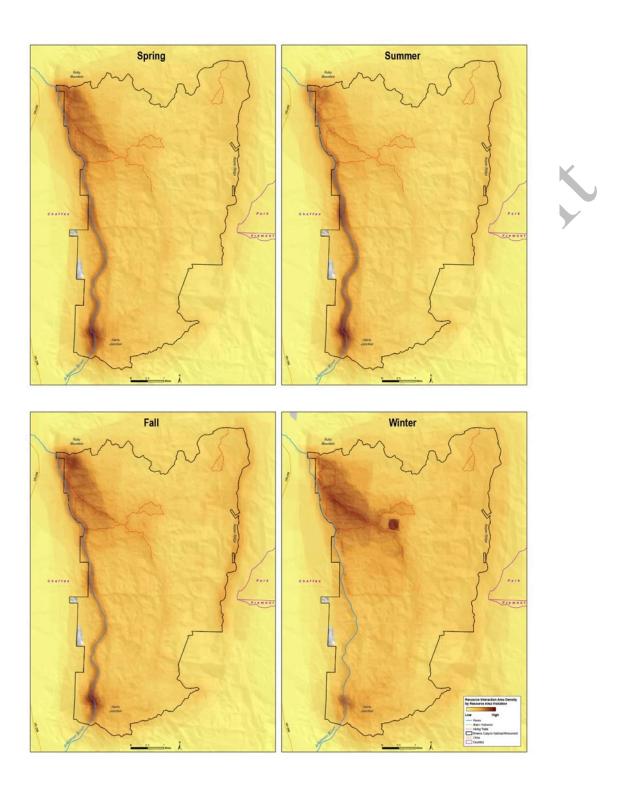


Figure 17. Resource interactions by season of use

Special Places

Session participants engaged in a second mapping exercise, which asked them to identify special places in or around Browns Canyon. Specifically, they were asked to identify up to 3 places in Browns Canyon National Monument that are especially significant or special to *you*. These are places with deep meaning or value. They indicated these places on the map using colored dots.

Figure 18. Special places mapping worksheet with follow-up prompts

Place #1 Name/Location of Spe	cial Place:				
1.1 Meaning: Why is it significant to you? What does this place mean to you?					
1.2 Landacena Values, What values on	honofita to you aggoriate with this place?				
Check up to 3 from the list below.	benefits to you associate with this place?				
□ Economic/Income	□ Cultural				
☐ Hunting/Fishing	□ Ecological/Wildlife/Aquatic				
□ Recreation/Adventure	□ Solitude/Sounds/Quiet				
□ Relaxation	□ Spiritual/Religious				
□ Gathering/Foraging	□ Fitness/Wellness				
□ Discovery/Learning	□ Symbolic				
□ Scenery/Views	□ Scientific				
□ Family/Social	□ Beauty				
□ Historic	□ Other:				

Taken all together, participants marked 312 places on the map. Community participants marked 237 places (1.8 per person). Online participants marked 78 places (0.4 per person). Figure 18 shows the mapping worksheet and follow-up prompts. For each place, participants talked about why each place was special or meaningful and what values or benefits they associated with those places from a list of 17 landscape values. Although they were asked to check up to three values, some did opt to identify more.

Place Meanings

For each place identified on the map, participants were asked the question, 'Why is it significant to you?' What does it mean to you?' Responses were open-ended both for the online and community-based listening sessions. The research team read each response and coded the response based on content. Some responses fit into multiple categories. Below we show the top 13 categories based on responses (Table J). For many, the place selected was important because of its sheer beauty, scenic features, or views. Participants used words like 'stunning' and 'spectacular' to articulate their views. The next most common theme had to do with recreation activities and the opportunity to hike, camp, raft, kayak, backpack, or bike.

Based on the frequency, these two themes were most prominent. Opportunities for solitude, remoteness, quiet or seclusion were also frequently noted, as well as history and geologic features. It is worth noting that many of the responses talked about places in Browns Canyon being important as a family touchstone. These may be special places that families return to year after year, or places where families bond in the context of a natural setting,

Table J. Most common themes mentioned for meaning or significance of a place

Table J. Most common themes mentioned for meaning or significance of a place				
Theme	No.	What is significant about this place? What does it mean to you?		
		 "I believe Staircase is the most beautiful part of Browns Canyon. It sees lots of rafts and people but the view is spectacular." "Stunning views - The beauty of nature is my solace." 		
Scenery, natural beauty, views	69	 "I love the beauty and the whitewater of the river corridor. It's a unique place in Colorado." "The new section of trail from Ruby Mtn. to Cottonwood Creek has surprisingly good views. Very intimate views. The views surprise you. "I just found it charming". 		
Active recreation	63	 "Hiking/picnicking with family, skipping rocks on river, walking along river, fishing, close to home, 'primitive' experience, day trip, rafting from Ruby to Hecla." "My family comes here every fall to view the color changes, camp, hunt, prospect." "After floating, working, camping, hiking several times, I just get a feeling of peace, of confidence, of tranquility." "Spent lots of time hiking, camping, paddling there." 		
Solitude, seclusion, quiet	30	 "The heart of Browns Canyon is special to me because of the solitude and recreational opportunities that it provides." "Preserved, limited use area to hike, backpack, explore, survey birds, photograph, without noise and commotion of mechanical (motorized) transport and devices." "Some of the most remote lands are within the USFS lands. I'd like the management of this area to be aimed at protecting its wilderness character." 		
Access	27	 "In many places along the ridge, which is more accessible, the remote views are special, and also in peril because access is better." "It's an area with easy access and should function as the main area for visitors to come and learn about Browns Canyon." 		

Theme	No.	What is significant about this place? What does it mean to you?				
		"History/past mining life. I call it paradise."				
11 . /11	2.1	"Original Wild West mining history trails. Connects many old time gold mines				
Heritage/History	21	to the river and supply towns. Must keep them all open."				
		"More unique scenery, geology in monument. Also history of railroad."				
		"Unique geologic formation above the old Austin trail main route running				
		between Turret and the river."				
Geology	21	"Peaceful river. Great exposures of precambrian metamorphic complex and late				
		volcanism. Abuts geothermal area (Hecla Junction)."				
		"Great example of explosive volcanism, ash flows, and mineral collecting."				
		"We begin teaching hiking skills, geology, and appreciation of nature to our				
Family bonding,		grandchildren at this site."				
stories,	19	"Hundreds of hours spent fishing there with friends and my son."				
traditions,	19	"I grew up enjoying the opportunity to search for Garnets on Ruby Mountain				
sharing		and hope to pass the love of science to my children with this as an experience				
		they can relate to and remember."				
		"The river represents wild and free to me. Free flowing; cool, clear water				
		surrounded by the natural beauty."				
Arkansas River	10	"The Arkansas River is one of Chaffee County's natural gems and economic				
Arkansas Kivei	18	drivers."				
		"The final big rapid before Hecla. Fun times at high water, even more fun at				
		super-low water."				
		"I feel that areas untouched by humans are important in and of themselves.				
Riparian		Plants, birds, and wildlands are sacred and do not need us to place an arbitrary				
Ecosystems,	16	commercial upon them."				
Habitat		"Habitat for endangered/threatened species; clean water, breathable air,				
		wilderness."				
		First canyon I river rafted through makes this area significant to me, and likely				
		many others."				
Memory,	15	Memories with friends and family, enjoying the outdoors and incredible beauty				
symbol, identity		of the canyon."				
	\bigcirc	"It's why I ended up here and a place that connects me to my family and				
		friends. We live, work, and play by the Arkansas River."				
Challenge,		"Places to explore, new scenes to see, unknown discovery."				
Adventure,	15	"Dangerous, inviting!"				
Danger						
		"Have been there many times, nice loop hike to river, see wildlife."				
Wildlife	14	"The length of this gulch areas has varied wildlife and is access to more remote				
		sections of the monument."				
Gem collecting,		"Good fishing; good recreational gold prospecting for fine gold in the riverbed				
rock-hounding,	12	and gravel bars."				
prospecting		"I started coming to Ruby Mountain as a little girl with my dad to hike and				
prospecting		collect garnets and obsidian."				

Landscape Values

Participants were instructed to assign landscape values from a list to each place identified. Community listening session participants identified an average of 5.5 landscape values per special place, compared to 4.4 values for online participants. The most prominent landscape value mentioned was 'recreation/adventure,' which was associated with 76 percent of all special places (Table K). 'Scenery/views' and 'relaxation' were both ascribed to at least half of all places mentioned. 'Solitude' also was very important, which was echoed in many of the previous sections. Several participants added values in the 'other' category, the most prominent being 'prospecting/gem collecting.'

Table K. Landscape values as percent of all special places (n=312)

		•	Percent of
Rank	Landscape Values	Number	Places
1	Recreation/adventure	237	76.0%
2	Scenery/views	184	59.0%
3	Relaxation	166	53.2%
4	Solitude/sounds/quiet	137	43.9%
5	Ecological/wildlife/aquatic	107	34.3%
6	Discovery/learning	101	32.4%
7	Fitness/wellness	98	31.4%
8	Family/social	89	28.5%
9	Beauty	86	27.6%
10	Historic	69	22.1%
11	Spiritual/religious	64	20.5%
12	Economic/income	56	17.9%
13	Symbolic	55	17.6%
14	Hunting/fishing	54	17.3%
15	Scientific	43	13.8%
16	Cultural	41	13.1%
17	Gathering/foraging	24	7.7%

Mapping Special Places

Listening session and online participants were asked to identify up to three areas in Browns Canyon National Monument that are especially significant or special to them. These areas were indicated on the maps with colored sticker dots. Figures 19 through 24 display maps that show the density of special places in Browns Canyon.

In Figure 19, we see that high density places are observed in the Ruby Mountain area (to the north) and Hecla Junction area (to the south), which are both popular access points to the Monument. Other highlighted places occur along the river at various beaches, campgrounds, and rapids, such as Browns Creek and the area of gulches accessed by the Turret Road it the southern section.

About the Maps

Participant-indicated special places were then digitized as GIS data features. The live listening session and online data were combined and analyzed to create a kernel density map to identify areas where special places were more highly concentrated. The kernel density is determined by calculating the number of points that fall within a 2,000 meter search radius, the optimal distance determined from the arrangement of all special places points. The number of points per square mile was calculated within the search radius for each point, then overlaid all search radius values into a composite surface to show differences in the intensity of use.

Special places that were mapped less frequently (fewer special places per square mile) are represented by lighter color tones, and special places that were mapped more frequently (more special places per square mile) are represented by darker color tones. An area is only considered for the density surface when two points are within the search radius. Areas that have not been calculated with at least two special places points have been left unshaded.

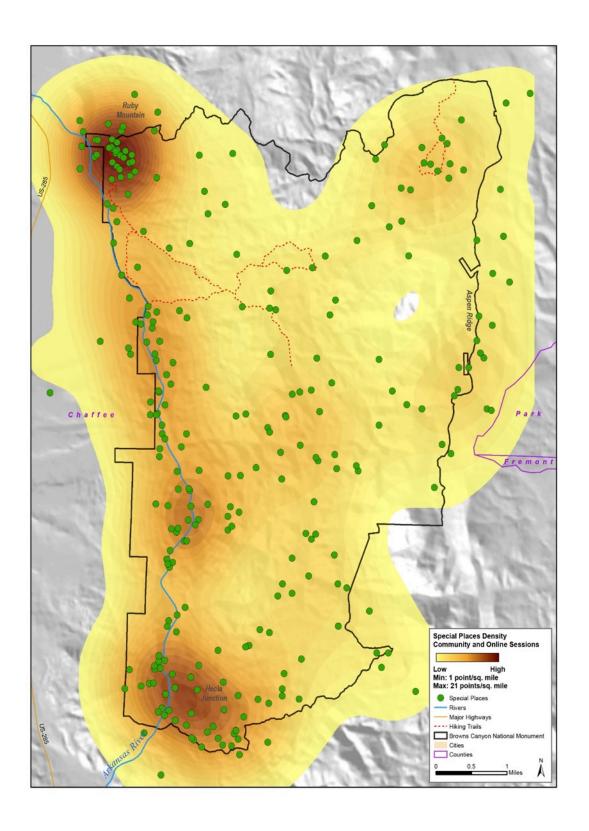
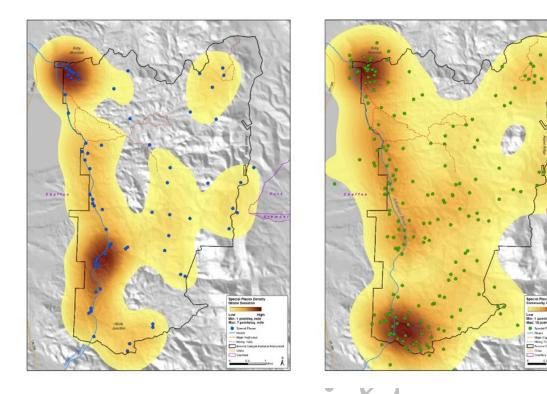


Figure 19. Special places: Density for community and online listening sessions



Online listening sessions

Community listening sessions

Figure 20. Special places: Comparison of online and community sessions

Comparisons of special places noted between the online and community listening sessions revealed some interesting differences (Figure 20). Online participants marked areas near Ruby Mountain and in the southern half of the Arkansas River, with locations primarily focused along the river corridor. Community participants also emphasized the river corridor, but their high-density spot was closer to Hecla Junction, Turret Road and Railroad Gulch. Community participants appeared to have places throughout the interior of the Monument to a greater extent.

Figure 21 shows the places marked by each of the community-based listening sessions. There do not appear to be many noticeable patterns; however, there is a general tendency for people to visit sites that are closer to their home. Thus, Salida residents' special places (depicted by red dots) tend to congregate in the Hecla Junction area, while Buena Vista residents are concentrated further north, near Ruby Mountain.

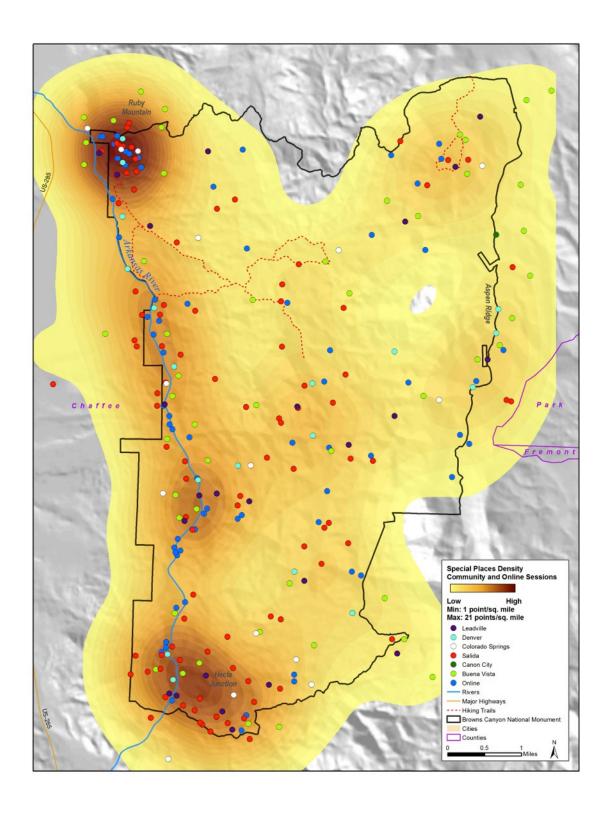


Figure 21. Comparison of special places by community listening session

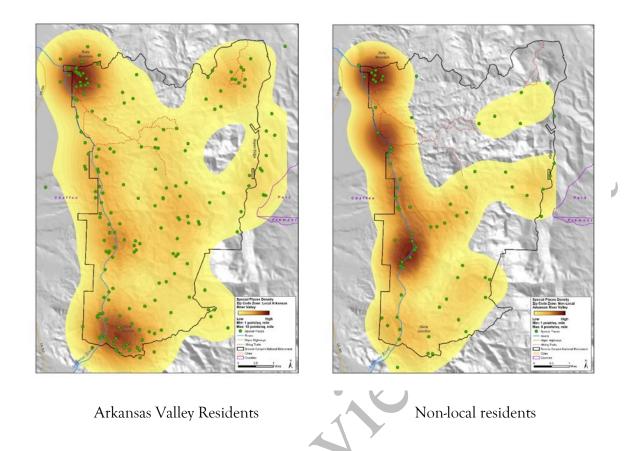


Figure 22. Special places: Comparison between Arkansas Valley Residents and non-Residents

There were some striking differences between residents of communities along the Arkansas Valley compared to those who lived elsewhere (Figure 22). We used zip codes to group participants into residential clusters (Appendix D). Those who lived in the Arkansas Valley placed their dots throughout the entire Monument, whereas those who resided outside the region focused their attention on the river corridor. Ruby Mountain was a hotspot for both groups. Valley residents preferred Hecla Junction as well as the northeastern corner (Four-mile area and Aspen Ridge).

Figures 23 and 24 show eight (of the 17) landscape values and where these values are associated spatially. Areas associated with 'Natural beauty' and 'Scenery' were located along the river as well as the Aspen Ridge Road. 'Solitude' appeared to be most common in the area of the monument near Railroad Gulch. 'Spiritual' values were concentrated in the central area of the monument, which is fairly inaccessible. 'Relaxation,' 'Recreation' and 'Ecological' values were concentrated along the river, but were fairly evenly distributed. 'Historic' values were concentrated at Ruby Mountain and the Hecla Junction/Turret road area, where there are historic mining claims and a railroad.

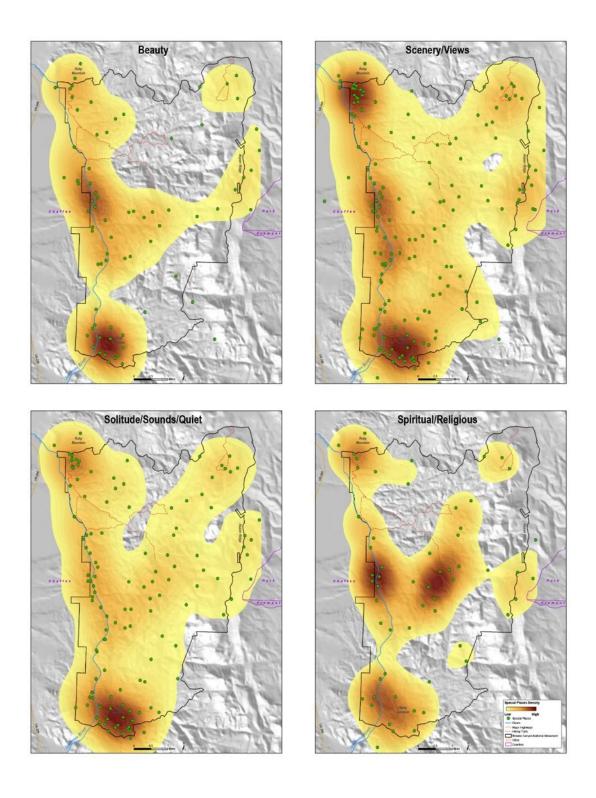


Figure 23. Special places: Comparison among landscape values: Beauty, scenery, solitude, and spiritual

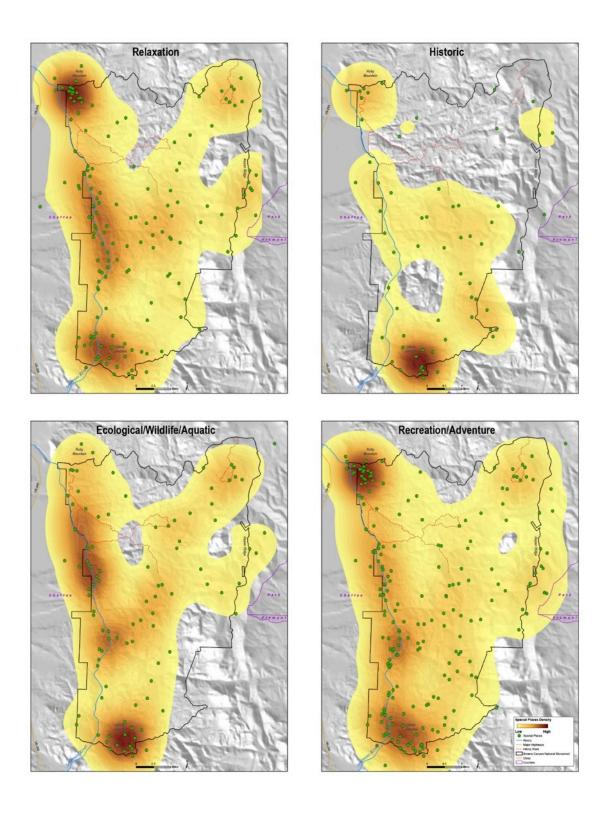


Figure 24. Special places: Comparison among landscape values: Relaxation, historic, ecological, recreation

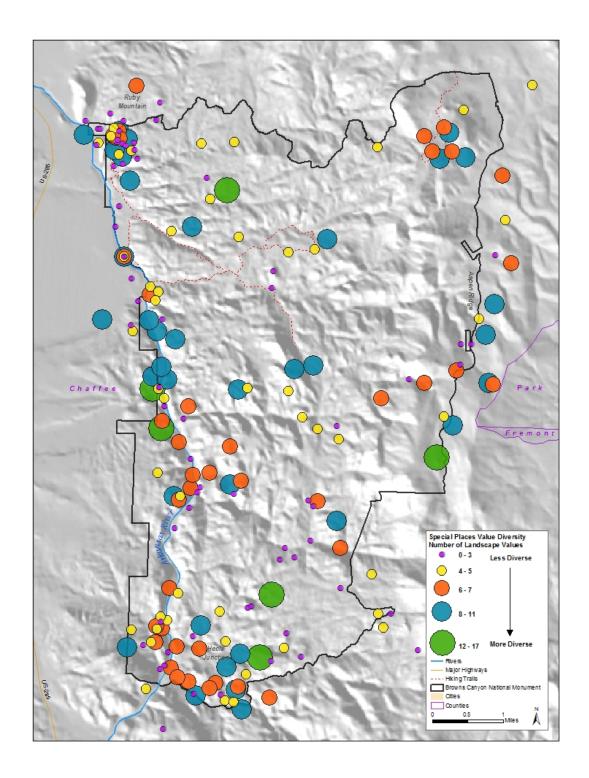


Figure 25. Special places: Diversity of landscape values

We also show the diversity of landscape values within sites around the Browns Canyon National Monument (Figure 25). The larger green circles indicate greater diversity, representing 12 to 17 landscape values. The most diverse areas in terms of values seem to be along the river corridor, Hecla Junction and Turret Road, in the gulch area, and Aspen Ridge Road. Places of high-values diversity may be places enjoyed by a wide variety of user groups and potential places for resource conflicts to emerge. Least diverse areas were in the Monument's interior areas, which are largely undeveloped.

Special Places Characteristics of High Density Places

Listening session participants were asked to identify special places which revealed about 30 areas of use prominent places in the Monument where public use is concentrated and in some cases highly diversified. Figure 26 displays a map of the most frequent places mentioned by listening session participants. Each colored symbol signifies a place mentioned by name by a listening session participant. In some cases, there may be multiple names used to mark the same general area. In other cases, there may be discrepancies in the actual locations of these places. Below we simply show what the participants labeled their points.

We combined information gathered from the prompts in both mapping exercises to examine 10 places mentioned in the listening sessions. For each place identified, we provide a range of observations about these places in the words of participants (quotations) to capture a feeling of the place. We also describe the special features that attract people to those places, and note any changes observed to that place. Many people identified the entire Monument and made comments about its attributes and the changes they have observed. However, we chose to focus on specific sites that would be useful from a management perspective. The 10 places described in this section include:

- ➤ Aspen Ridge
- > Hecla Junction
- Ruby Mountain
- ➤ Turret Trail
- ➤ Arkansas River
- > Browns Creek
- Cottonwood Creek
- Railroad Gulch
- > Stafford Gulch, Cat Gulch
- Green Gulch, Spring Gulch

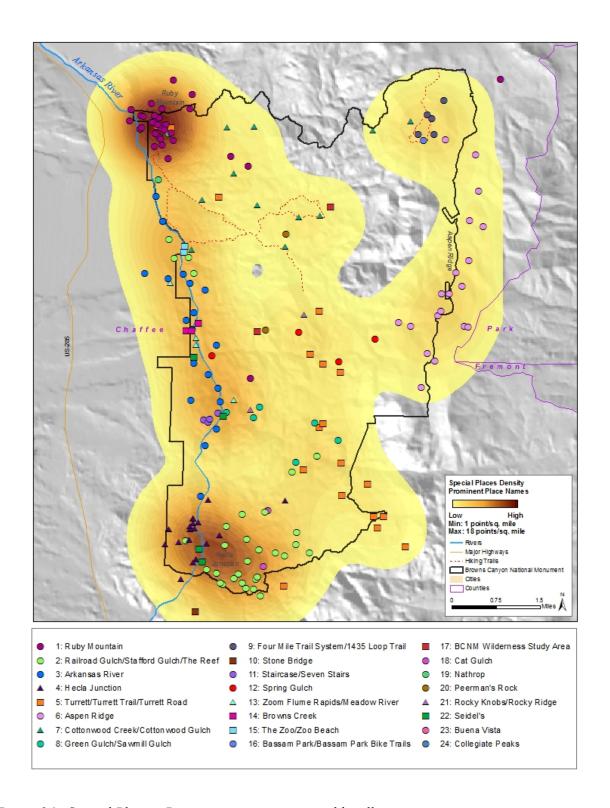


Figure 26. Special Places: Prominent sites mentioned by all session participants

Aspen Ridge

- "My family comes here every fall to view the color changes, camp, hunt, prospect."
- "The few visitors and remoteness of this area are its greatest value."
- "Beautiful habitat and accessible area for me and my elderly relatives"
- "I have heard there is an increase in dispersed camping along the ridge. I am concerned about the increased human impact."
- "My family and I have spent many days ATVing, picnicking, viewing changing leaves, and just being outdoors here."
- "Large aspen groves, rock outcrops, bristlecone/limber pine, views across valley to mountains, great topological relief from ridge west to river."
- "This is a beautiful area with varied topography and forest types as well as extraordinary views and wildlife viewing opportunities."

Special Features

- Aspen trees
- Views of the distant mountains (Collegiate Peaks); scenery
- Accessibility/Trails
- Motorized access
- Fall color
- Forest, woodland, habitats, landscape; flora and fauna
- Good place to take visitors
- Opportunities for bike-touring and camping-especially in the fall.
- Much less visited, high country, forested, and more wildlife.
- Grazing permits there; cattle grazing, "good grass"
- Wilderness character

- Less and less access for motorized recreation; More limited access points
- Sudden aspen decline
- More local rural county off-road vehicles, so limit off-road vehicle user-created roads
- Campsites closed; reduced camping access
- More dispersed camping causing degradation; wear & tear
- Busier, more traffic (especially in fall)
- Social trails/roads developing to popular dispersed camping sites.
- Routes are more degraded.
- Off-road trespass
- Road closures that limit access to areas that I intent to utilize.
- A lot more vehicles on FR 185; there always seems to be the sound of ATVs.
- Increased human use; increased use on and off FR184 is negating impacting roadless and wilderness characteristics. Use on 184 is negatively impacting big game winter range.
- More traffic on county roads and 4-wheel drive roads.

- Wear and tear on road and non-designated campsites.
- Very few since it is without trail access. Very few visitors. Some limited impacts due to popularity increasing in motorized traffic along Aspen Ridge.

Hecla Junction

- "Learned to kayak here. Appreciate that the road is crummy. Would hate it if the area became more accessible."
- "My first memory of gorgeous scenery and the river. A favorite place to take casual tourists."
- "Most boats get out at Hecla. Floating past Hecla always decreased river traffic and adds excitement with rapids below."
- "Hiking/picnicking with family, skipping rocks on river, walking along river, fishing, close to home, "primitive" experience, day trip, rafting from Ruby to Hecla."
- "Spent lots of time hiking, camping, paddling there."
- "Area has opportunities to provide; any recreational opportunities have been utilized. More dispersed access for visitors would be good so it can be more enjoyable."

Special Features

- Camping
- Picnic areas
- Bike trails
- River access commercial put-in/take-out site
- Trail access; trails for hiking
- Scenery
- Facilities; amenities
- Hunting, guiding, recreational opportunities.
- Reasonable access
- Great place to explore and soak your feet; play in the water
- Fishing, swimming with dog, hiking.
- Place for raft and kayak watching
- Great place for outdoor education, environmental education, and stewardship education.
- Wildlife and birds.
- Access, hunting, rafting, fishing, hiking.

- Higher use by boaters and campers; more people; campground is busy
- Revitalized camping area; improved camping area.
- Litter; trash; other human impacts
- Better launch (boat ramp) and take-out areas, better facilities, car camping.
- Road improvements.
- Parking lot expansion, increase in invasive plants with disturbed soil from construction.

- Unmanaged camping and motor use off spurroad of CR Hecla 193. Live tree cutting and wood gathering. Some long-term camping prohibits dispersed camping along this road. Elk production and winter range; human impact is impacting wildlife.
- The amount of sediment entering the Arkansas River from the road and rafter parking /
 boating take-out is atrocious. CPW, Chaffee County, and the BLM need to improve
 make improvements to mitigate the sedimentation entering the river.

Ruby Mountain

- "I started coming to Ruby Mountain as a little girl with my dad to hike and collect garnets and obsidian."
- "It's an area with easy access and should function as the main area for visitors to come and learn about Browns Canyon."
- "I grew up enjoying the opportunity to search for Garnets on Ruby Mountain and hope to pass the love of science to my children with this as an experience they can relate to and remember."
- "I use it as a horse and hike trailhead. Like to watch Bighorns in this area, when not run off by OHV staging and use."
- "Great example of explosive volcanism, ash flows, and mineral collecting."

Special Features

- Family recreation spot
- Volcanic area for rock-hounding: collecting Spessartine garnets, rubies, apache tears and gems
- Historic site
- Close hiking, very scenic, enjoyable trails
- River access Arkansas River; boat ramp; put in/take-out
- Mountain Ruby mountain
- Exposed rock, geology
- Hiking opportunities; trailhead to WSA
- Scenery Views west from Ruby Mtn., remote beauty
- Easy access to low- key ATV/ORV trails
- Nice campground; accessible
- Bathrooms; facilities
- Hunting access
- Wildlife, birds

- Increasing use of off road vehicles (ORVs) leads to conflicts with WSA (wilderness study area) hiking trailhead. Conflicts between ORV parking/staging and riparian area ORV staging and use on road and parking impacts hikers, residents, campers, picnickers, etc.
- Fewer birds of prey
- River is packed with boats. It's difficult to fish the boats are constantly disrupting the fish.

- Erosion more people, walking off paths, social trails; beach erosion
- Increased use, more activity, more people
- Overharvesting of garnets
- Garbage, trash, many throw trash in the river
- Higher use of off road vehicles (ORVs)
- Commercial outfitters getting pushy
- Increasing OHV use results in conflict
- More people, more day use, raft trip after raft trip in succession
- New facilities and campgrounds
- Spread of invasive species
- Road closures that affect how and where you can gain access

Turret Road and Trail

- "Beautiful forest, scenic drives, family hiking and exploring, hunting, ATV use, scenic views of Collegiate Peaks, bouldering/rock scrambling on rock outcropping."
- "The 'new' section of the trail, north of Little Cottonwood, offer variety of effort, middle little valleys, surprising viewpoints."
- "Back in the late 70's and early 80's you could travel the road from Turret all the way north through the entire area now called the BCNM. It was a great loop to take the Aspen Ridge Road then up the Turret Road."
- "Turret trails are great to get off the roads, deep into the hills to hunt for rocks/gems."
- "I've seen much more activity up here over the years, which concerns me. I don't want to see the area turned into a parking lot!"
- "Since the monument designation, all forms of wildlife seem to have been affected to some degree. We hope that the increased traffic of all kinds is not indicative of a continuous increase, and we ask (beg) that this area be left as primitive as possible. We understand that people need to be allowed access, but we hope that it won't be developed like Ruby Mountain or Hecla Junction."

Special Features

- Mining history. Original Wild West mining history trails. Connects many old time gold mines to the river and supply towns.
- Easy access from Salida and south (SR184/FR184)
- Remote area; solitude
- Stunning views; scenery
- Diverse ecosystems: gulches, forest, woodland, springs
- Rock formations, exposed rock, pinnacles, geology
- Hiking trails hike into out via Green Gulch; access to Railroad Gulch
- River views
- Bush-whacking opportunities to link up for loop trail out of Turret
- Access to all of Browns Canyon

- Increase in vehicular traffic; more use
- Motorized and mechanized recreation should not be allowed on this trail. Use of the trail should be consistent with its historic foot and horse use.
- Ever since the "Wilderness Study Area" designation the Turret Rd. has been closed and this road should be reopened for motorized access for elderly, disabled and other motorized users.
- New signage on designated trails; tourists are getting lost; wandering onto properties
- Need interpretive signs for historic sites
- Improvements to trails
- Wildlife impacts
- Some access blocked, roads closed.
- Need parking area and better marked trailhead
- Many new homes in Turret; New developments on private lands near Turret.
- Adverse impacts from motorized use. Erosion. Trail degradation.
- Last part of the trail has deteriorated to the point that it needs to be closed.
- Reclamation/rewilding of former roads due to National monument designation.
- Disturbances from motorized use; otherwise VERY quiet wilderness experience.
- Motorized trespass. Built/installed gates/fences to prevent this and it still occurs regularly.
- Loss of lower trailhead to Old Stage Road
- "There has already been a very significant increase in vehicular traffic to this once virtually unknown access, especially by people whose vehicles and equipment are not sufficient to properly access the area without causing vehicle damage and/or dangerous situations. The increased traffic has also disrupted a significant number of traditional wildlife grazing/calving/nesting/riparian areas, not to mention conflicts with private property owners who are forced to inform visitors about access, because visitors are not being properly directed and informed. PLEASE keep this access as low-key as possible!"



Arkansas River

- "I love the beauty and the whitewater of the river corridor. It's a unique place in Colorado."
- "In a busy weekend it can be a bit of a junk show in terms of "solitude". However, you can still go after or before and the canyon can still be a place where you'll find peacefulness. And in the off season...amazing. Pure love and joy."
- "Incredible river corridor, challenging recreation opportunities, scenic views, unique geologic features, unique historic features (railroad). Primitive camping and hiking opportunities-maintain these opportunities for solitude and undeveloped recreation sites."
- "Flowing water in the river, wildlife habitat, I like to watch the American Dippers nesting and feeding. River rafting and playing in the water."
- "Near the end of the trip brings up reflection of how the day went. I don't usually want to leave. I slow down, I ship the oars, look around, and smile."

Special Features

- World class rafting, kayaking
- Scenery
- Fishing
- Gold prospecting; prospecting for fine gold in the riverbed and gravel bars.
- Forest
- Canyon
- Riparian area,
- Wildlife, fishing
- River
- Rapids
- Geologic features-pre-cambrian rocks and tertiary volcanics

- Getting more crowded; more use; Too many rafters, kayakers & fishermen
- A big rise in numbers of people rafting the river. Some days you could walk down the river on rafts.
- Less tranquil, more noise, due to people
- Greater variety of users on the river
- Warmer waters, more people, more crowded campgrounds/sites
- Excessive overcrowding from (mostly) commercial rafts
- Mining impacts on river; honor the mineral withdrawal in the designation.
- Long-term camping impacts.
- Impacts from mining and agricultural irrigation (water quality).
- More variability in water levels (unusually high/low).
- Less access for taking special needs clients in and out of the river. Less access and egress for fishing boats.
- Increased use of the river. It concerns me that this area will become permitted, which favors commercial over private.

Browns Creek

- "It's pretty special ecologically. Before Hill Property water sale, the creek used to have waterfalls."
- "After floating, working, camping, hiking several times, I just get a feeling of peace, of confidence, of tranquility."
- "Beautiful tributary stream with meadow camping near confluence with Arkansas River."

Special Features

- Shaded camping area; a fun spot to camp just off the river
- Great hike to the top of Zoom Flume rapid.
- Stream, fishing, nice camping area
- Access to rock-climbing area. Good climbing
- Browns Creek: good place for launch on river; sandy beaches
- Dispersed camping areas.
- Beautiful whitewater

Changes Observed

- Browns creek itself is occasionally polluted with nitrates from agriculture
- Increased number of hikers; very busy
- We need some guidelines on trash removal and waste removal for this area, but please do not start requiring permits.

Cottonwood Creek

- "Solitude. Beautiful non-used carport. No water. Did a backpack loop, and took all water in. Looped over to Arkansas River and back to Ruby Mountain."
- "Great backcountry camping area. I camped here before Browns Canyon National Monument was even thought of."
- "Sandy gulches to hike, fluted granite with pools of water. Incredible views of Collegiate Peaks."

Special Features

- Hiking opportunities
- Scenery
- Gulches, sandy gulches
- Ancient springs
- Ridges; rugged landscape
- Maintained equestrian trail
- Functioning riparian, ecological conditions, "OSHA" medicinal plants.
- Sheep habitat production area, seasonally.
- Relatively easy access on existing trails, attractive to visitors who are not comfortable off trails.
- Photography

Changes Observed

Loss of access to old stage road from this location

• Never used to see any people, but now may see people at least at Ruby Mountain and the river. More social trails from river inland. Increased camping in the 4-mile area.

Railroad Gulch

- "Most dramatic and concentrated areas in interior of BCNM. A keystone region in terms of future visitor enjoyment. Reef and Lower Spires much more challenging to get into. No trails, require backcountry skills."
- "Railroad gulch if very scenic, it's a shame only half the gulch is in BCNM."
- "So dramatic and colorful that it is the non-river essence of the monument experience"
- "The most scenic, jaw dropping, crazy that a railroad was built here."
- "Good hike, access from Turret, leads to views of amazing rock formations, variety of terrain."

Special Features

- Beautiful scenery; most dramatic single location in interior of NM
- Great rock climbing destination
- Canyon; Stunning, one-of-a-kind canyon.
- Topography: Gulches, crags
- Challenge to visit
- Wildlife; Raptor nest areas, bighorn sheep,
- Historic features. Also history of railroad; Ghost railroad to mine
- Geology; rock formations; Spectacular geology/topography that is hard to see except from river.
- One of the highest points in the monument.
- Great views, excellent hike
- Access roads to Turret.
- Opportunities for solitude
- Gulches, accessibility for cattle it is a route to and from other grazing areas.
- Springs

- Increased use (hikers); Higher visitor use patterns.
- Some illegal motorize use a long time ago.
- Less access from Turret area.
- Mostly just major erosion.
- Color (Trees)
- More traffic from Turret where there is poor access.
- Rampant motorcycle trespass occurring
- May justify trail building to control impacts.
- Railroad gulch has more and more people coming since it is featured in the BCNM promotion.
- Reef and Lower Spires not much visited-hope that pattern continues in BCNM.
- Old railroad grade.

Stafford Gulch/Cat Gulch

- "Has Utah-style cliffs, prairie falcons. Cliff walls and views of river and interior views of Browns Canyon National Monument."
- "Awesome views of the river, geologic features (the Reef, Hecla Castle, Arkansas River, Collegiates, and Buffalo Peaks). Seclusion of the canyons."
- "The length of this gulch areas has varied wildlife and is access to more remote sections of the monument."
- "Unique geologic formation above the old Austin trail main route running between Turret and the river."

Special Features

- Bighorn sheep habitat seasonally; Wildlife corridor in Stafford
- Peregrine nesting population
- Hiking opportunities; ruggedness (gulches)
- Scenery of Collegiate Peaks, Arkansas valley,
- Rock formations; hoodoos and spires,
- Meadows
- History
- Solitude

Changes Observed

- Increasing illegal mountain bike use
- Vandalism, trail clearing
- Concern about people in the area (sheep production area).
- New trail established.
- Erosion of trail (under mitigation). Needs better marking at top of hill where trail forks.

Green Gulch/Spring Gulch

- "The geology, cliffs, colors, raptors, desert, riparian ecosystem, photography, views, quiet, solitude."
- Springs, livestock and wildlife watering, it is important to be able to maintain tank, pipe, etc. with backhoe for example.

Special Features

- Challenging to access no trails, spectacular geology; Challenge of access-requires backcountry navigation and physical skills
- Wildlife viewing-raptors,
- Scenery; Spectacular views west to the Arkansas River and 14'ers. (Collegiate Peaks)
- Historic sites, old cabins, historic remains, corals, mines
- Trees beautiful timber pines, aspens, Douglas Firs
- Spring and tank where livestock and wildlife water

- General topography; rugged
- True wilderness experience

Ideas and Approaches for Management

Listening session participants were given an opportunity to share ideas for managing the lands, rivers, and resources of Browns Canyon National Monument. More than 290 people provided their input and some had multiple ideas. There are too many suggestions to discuss each, but the full list of ideas sorted by general topic area appears in Appendix F. Here, we note five prominent categories of comments and issues that surfaced from information gathered. For each theme, we provide exemplary quotations that illustrate the diversity of viewpoints.

How to accommodate visitors and recreation users while protecting the environment?

Many participants recognized that use of Browns Canyon was increasing and had concerns about the increase in visitor use on both the natural and social environment. Some mentioned impacts on the soil and plants from camping and social trails. Others talked about crowding and converging use in key campsites and on popular trails. For some, the solution involved concentrating use in particular areas. Others advocating dispersing use throughout the canyon.

"People are going to come visit Browns Canyon. We need to manage and direct that traffic in ways that will mitigate negative impacts. That means certain areas will be high use. However, we need to make sure the majority of the monument see's minimal impacts."

"I'm concerned that some of them may get "loved to death". So we need to channelize ad focus uses and use areas, such as turnouts & overlooks on Aspen Ridge Road."

"Need to manage any overuse of the river and the whole area. Manage physical impact, number of users to reduce social and physical impacts."

"Preference for dispersed rather than concentrated use; spread out impact rather than concentrating impact."

How to provide access to a variety of public users?

Several participants commented on the need for managing officials to consider the diverse needs of visitors, including those with disabilities and senior citizens who desire to have a nature experience, but may require motorized access. Others talked about access for specific types of users, including equestrian and mountain bikes. There was a widespread concern that parts of the Monument would be off limits or historic use would be restricted.

"Access to the Monument for handicapped, wounded warriors, and the elderly is non-existent."

"Have flat trails for easier access for elderly/disabled. Give them access to area like Ruby Mountain."

"Local communities need access to their Monument."

"I would like to see the access road 184 north from Turret open and available to access the Brown's Canyon area. With little access anywhere else into Browns Canyon this road can give serve a unique purpose in allowing all user groups an opportunity to visit."

How to manage increased use of the Arkansas River by commercial land private boaters?

Guides were concerned about their economic future if restrictions were to be imposed on permits. Private boaters were concerned about the increased use of the river and crowding in popular put-in places, beaches, and campsites.

"We don't want to limit the number of people that can visit, but travel and other restrictions should be in place so Browns Canyon does not become degraded from over use. This is particularly true for the river corridor."

"As a river outfitter I am concerned about how this management plan will impact commercial rafting operations. 50% of our use is in Browns Canyon. Additionally, river camps being taken over by hikers is a concern."

"Cut down on the amount of commercial rafts on the river, it's simply wrong to destroy the experience on the river for other user groups all in the name of [rafting companies] making a buck."

How to develop the recreation facilities to maintain a low-level of development?

Several participants acknowledged the need for safe public access and visitor opportunities, but urged managers to consider more primitive sites and low levels of development.

"We understand that access to the monument is important (and inevitable) but we ask (perhaps even beg!) That the southern access (in its entirety, including FR 184 and the Austin Trail access) be left as undeveloped and low-key as possible."

"I'm crossing my fingers that the existing access bear Turret can remain open, but kept as primitive and un-promoted as possible. Let's keep it as a low-key backcountry option (please!)"

Which recreation and public service facilities should the agency invest in?

In addition, many participants identified specific recreation maintenance projects or areas for future investment. Several potential projects mentioned in the responses included:

- ➤ Footbridge at Hecla Junction
- Visitor center at Hecla Junction
- Parking and trail work on the Turret Trail
- Parking for equestrian users and trailers (in general)
- ➤ Hiking trails into remote backcountry areas
- Camping sites along Aspen Ridge Road
- > Sign-in kiosks for river campgrounds

In addition to the five themes noted above, many other topics were raised, including:

- Protection of heritage resources (cultural, historical) in the Monument
- Desire to retain places where solitude, quiet, and remoteness are preserved
- Need to manage motorized recreation use (voices for and against motorized use)
- Desire by some for additional protection of Browns Canyon (i.e., wilderness)
- Concern about protection of wildlife, plants, aquatic ecosystems, riparian areas

- > Clarity on permit system for minerals collection; concern for impacts of gem collecting
- ➤ Concern for water quality and availability
- Conversion of historic railroad to trail system and desire to protect railroad heritage
- Continued Monument access for dogs and pet owners
- ➤ Issue of trespassing on adjacent lands to access Turret area (safety concerns)
- Need for additional signage for wayfinding and interpretive signs for educating visitors
- > Desire to continue historical grazing; also concern about environmental effects
- Concern about mining in the Nathrop area

Some participants wanted to keep Browns Canyon the same as it has been, in terms of access and use. Others desired more protections to restrict use. Some favored the Monument designation while others expressed the frustration of reduced access. Opinions were varied and diverse.

Final Comments and Concerns

Online participants were provided with a final open-ended comment box to provide any input not previously captured. The responses indicated several issues and challenges that suggest further conversations among Monument managers, stakeholders and the public. The comments fell into several prominent themes. These are presented below with a small sample of quotations to illustrate them. A complete list of comments appears in Appendix G.

Provide a 'primitive' outdoor experience; concerns about crowding and commodification

Now that the area has been designated as a Monument, the potential for use to increase has concerned some. Many appreciate the low-key recreation facilities and the minimalistic trails. Some were concerned about the 'Disneyfication' of the Monument, given its new status. Others were concerned about the potential crowding and overuse.

- ➤ I hope to do more hiking in the Browns Canyon Wilderness. Can we keep this a secret again now that it's protected? Thanks.
- The area as is a special haven. Promoting it will only damage it further. Look at what has happened to the Four-mile landscape as it has been promoted. There are fewer animals seen, more land scarred by unknowing tourists, and dangerous roads.
- Make sure people don't think of it as a Disneyland experience. Too frequently, I see inexperienced tourists near rivers and playparks they don't understand the power of water and Mother Nature.
- Don't allow lots of commercial permits, e.g. mountain bikes, horse, a couple are ok. Don't change rules for river outfitters. Keep interest groups like Friends of Browns Canyon involved and LISTEN. Thanks for your efforts!
- I think new developments of roads, trailheads and trails should be kept to a minimum and really try to maintain the wilderness character. Thank you
- Duit building trails! If people want urban trails they should stay in Denver!
- ➤ Please keep it as wild as possible, minimize the pavement and annoying Forest Service over sized buildings.

Expanding and improving access to various types of users and keeping it 'public'

Others want to see access expanded or improved for certain types of recreation visitors, such as mountain bikes, equestrian, and motorized use. A few commented that the Monument designation was intended to provide access to a variety of users and not restrict use.

- > Open it up to the public and not the few.
- Monument] eliminates historical significance. Open road. Access denied defeats original intent.
- Please open up recreational prospecting on the edge of the monument at the Arkansas River and at Ruby Mountain again (or even through the whole monument). Limit it to recreational prospecting only no commercial operations. Add more ATV/OHV friend.
- Please consider keeping trails open for horseback riding. It is part of our heritage and a magnificent way to enjoy the natural beauty of the area.
- Yes. We must enforce the promise that there'd be NO losers, and all user groups would get to keep doing their activities. Also, we must keep all trails, roads, dispersed camp sites open. BCNM must NOT end up yet another plant & animal preserve.
- Access is limited and trails need to accommodate bikes.
- Availability of mountain biking within monument.
- > Build more hiking and biking trails.

Maintain a balance between commercial river use and private boaters

Some comments highlighted concerns about crowding and the number of guided raft trips on the Arkansas River. Questions were raised about how to maintain a viable whitewater industry that is vital for the local economy while maintaining desirable boating experiences for recreational visitors to the Arkansas River.

- A reduction in the number of commercial rafts allowed per day would greatly increase the quality of the recreational experience.
- Did I mention that there are too many commercial rafts!
- This is probably the first and most visited place I use and go to in Colorado. My children have started going on whitewater trips with me. So, I would like to see it remain un-permitted for whitewater users and slanted for use by private boaters.
- Should be accessible to individuals as we'll as rafting companies.

Desire for specific recreation Infrastructure investments

Some types of recreation users wanted to see improvements to particular places in the Monument, from Hecla to Ruby Mountain.

- Create an access over the river from Hecla Junction
- The parking area at Ruby Mountain is currently insufficient to support public access into the Fourmile Management Area, much less to support the additional demand of Monument visitors.
- Establishing campgrounds other than Ruby Mountain, would be great as it seems like a busy whitewater campground.
- ➤ I would like a visitor's center at Hecla Junction and a pedestrian bridge over the Arkansas River to give better trail access to the center of the monument.

- If funding becomes available, improve the private boater launch at Hecla, improve the signage for the boat launch, and on high volume days, create penalties for private boaters who use the commercial launch and commercial boats who use the private launch.
- Love to see a long trail along the river. Would be really fun in the summer to view the rafters. Wish Railroad Gulch had made the boundary.

Varying ideas about motorized use in the Monument

Some participants were very adamant that motorized use be limited or prohibited in the Monument boundaries, while others sought access for motorized use. In one case, a participant offered an example of collective stewardship of motorized trails by local user groups. Some sought special areas designated for motorized use.

- **>** Keep motorized vehicle access as promised the monument proclamation.
- ➤ NO MOTORIZED VEHICLES OR EQUIPMENT!!!
- ➤ Please keep motorize use away from the river and riparian areas along the river corridor. No more motorized use trails. Improve and manage existing roads for environmental impacts and social impacts to non-motorized users. Concerned for noise impacts.
- I have a motorized trail adoption group and if there is a need to help manage this area my group would do what is necessary to protect this area while maintaining motorized access.

Comments on National Monument designation and protection

Several participants used the open comment space to reflect on the Monument designation. Some were deeply against the Monument, with concerns about limited access, restricted uses, and loss of a lifestyle. Others were very supportive of the designation and favored protection.

- Human recreation are not valid historic or scientific reason for designating a national monument. This format does not permit adequate public input on values which are not centered around human use. Intrinsic values.
- Hundreds of local and state-wide individuals, organizations, local governments, business enterprises, and US Senators and Representatives have worked for years to have this area designated as Wilderness. This is a strong constituency for strict protection.
- Should have been left alone, inserting another lawyer of administration / management is NOT what the area needed. You want to claim to protect it? Fine, make it a wilderness area instead.
- So happy that this is a National Monument? It is a special place here in Colorado that is worthy of protection.
- This designation was a political payback to Senator Udall for his unbending support of Pres. Obama support that cost Udall his job. That is the only reason that this designation was added to the narrow list of inaccessible Monuments.
- The remaining Monument area is not large, but it is very unique and every decision must prioritize protection over access. We must access the area on its own terms- that is by non-motorized means. Don't even consider "enhancing" motorized access.
- ➤ I believe it is important to protect and manage our public lands. The Creation of BCNM was a good thing, but every public land should not be made off limits to motorized vehicles. I believe there should be designated Wilderness Areas as well.

- America's best idea was to protect land and water from destruction. Thanks for keeping the idea alive and the land safe.
- ➤ I believe it is important to protect and manage our public lands. The Creation of BCNM was a good thing, but every public land should not be made off limits to motorized vehicles. I believe there should be designated Wilderness Areas as well.

Planning Process

Finally, a few participants made comments on the Monument planning and management process.

- The reason outfitters got behind this, was the promise that it would not negatively impact our businesses. The fact that you are now seeking input for a management plan we were told would not change from how it has been in the past is troubling.
- ➤ Please practice good stewardship over this wild place; recognize that climate change is affecting all living things; keep the public informed of ongoing plans.

Conclusion

This report summarizes a pilot approach to integrate collaborative planning methods early in anticipation of developing the Browns Canyon National Monument management plan. This study relied on two processes: the stakeholder situation assessment and human ecology mapping. The situation assessment approach gathered information as a part of a larger set of processes and events in the region and addresses questions about 'the who?' 'the what?' and 'the why?' The human ecology mapping approach strongly emphasizes the geographic context and answers. questions about 'the where?' 'the how?' and 'the when?' Taken together, these two approaches weave a rich tapestry that shows the connections, the colors, and the textures of the Browns Canyon social landscape. The results demonstrate a desire to share the wonders of Browns Canyon with visitors and concerns about impacts on the Monument and to local communities; to provide opportunity for access and facilities while still maintaining the remote and rugged nature that set the course for Monument status; and to honor the values of this area that visitors from near and far love for recreation, historic and cultural resources, and solitude. This deepened understanding of the commitments and connections to the area and the recommendations for how best to engage the diverse communities and stakeholders will contribute to the USFS assessment of the planning area and BLM's analysis of the management situation for Browns Canyon National Monument.

References

Besser, DT, McLain R, Cerveny LK, Biedenweg K, Banis D., 2014. Mapping landscape values: issues, challenges and lessons learned from fieldwork on the Olympic Peninsula, Washington. *Environmental Practice* 16(2): 138-150.

Biedenweg, K., Cerveny, L. and McLain, R., 2014. Values Mapping with Latino Forest Users: Contributing to the Dialogue on Multiple Land Use Conflict Management. *Practicing Anthropology*, 36(1): 33-37.

Brown, G.; Reed, P. 2009. Public participation GIS: a new method for use in national forest planning. *Forest Science*. 55(2): 166-182.

Brown, G, Kyttä M., 2014. Key issues and research priorities for public participation GIS (PPGIS): A synthesis based on empirical research. *Applied Geography* 46: 122-136

Brown G, Kelly M, Whitall D. 2014. Whose public? Sampling effects in public participation GIS and volunteered geographic information (VGI) systems for public lands management. *Journal of Environmental Planning and Management* 57(2): 190-214.

Brown, G. and Fagerholm, N., 2015. Empirical PPGIS/PGIS mapping of ecosystem services: a review and evaluation. *Ecosystem Services*, 13: 119-133.

Klain, S.C. and Chan, K.M., 2012. Navigating coastal values: participatory mapping of ecosystem services for spatial planning. *Ecological economics*, 82: 104-113.

McLain, R., Poe, M., Biedenweg, K., Cerveny, L., Besser, D. and Blahna, D., 2013. Making sense of human ecology mapping: an overview of approaches to integrating socio-spatial data into environmental planning. *Human Ecology*, 41(5): 651-665.

Pocewicz, A., Nielsen-Pincus, M., Brown, G. and Schnitzer, R., 2012. An Evaluation of Internet Versus Paper-based Methods for Public Participation Geographic Information Systems (PPGIS). *Transactions in GIS*, 16(1): 39-53.

Ramirez-Gomez, SOI, Brown G, Verweij PA, and Boot R., 2016. Participatory mapping to identify indigenous community use zones: Implications for conservation planning in southern Suriname. *Journal of Nature Conservation* 29: 69-78.

Raymond, CM, Bryan, BA, MacDonald, DH, Cast, A, Strathearn S, Grandgirard A, Kalivas T. 2009. Mapping community values for natural capital and ecosystem services. *Ecological Economics* 68(5):1301-1315.

Sherrouse, BC, Clement, JM, Semmens, DJ. 2011. A GIS application for assessing, mapping, and quantifying the social values of ecosystem services. *Applied Geography* 31(2): 748-760.

Sieber, R. 2006. Public participation geographic information systems: A literature review and framework. Annals of the Association of American Geographers 96(3): 491-507.

Tyrväinen, L. Mäkinen, K. Schipperijn, J. 2007. Tools for mapping social values of urban woodlands and other green areas. *Landscape and Urban Planning* 79(1): 5-19.



Appendices

Appendix A. Situation Assessment Interviewees and Interview Prompts

The Consensus Building Instituted conducted interviews by telephone individually and in small groups. The list is alphabetized by the interviewees' last names.

- 1. Ben Lara, U.S. Forest Service
- 2. Brady Everett, Rancher
- 3. Dave Potts, Chaffee County Commissioner
- 4. Dudley Fecht, High Rocky Riders
- 5. Bill Dvorak, National Wildlife Federation; Dvorak Expeditions
- 6. Terry Scanga, Upper Arkansas Water Conservancy District
- 7. Greg Felt, Upper Arkansas Water Conservancy District; ArkAnglers
- 8. Melissa Garcia, Bureau of Land Management
- 9. Lee Hunnicutt, Veterans Expeditions
- 10. Kevin Nicastro, CityWild
- 11. Bella Martinez, CityWild
- 12. Randy Witham, Gold Adventures
- 13. Rob White, Colorado Parks and Wildlife
- 14. Shawn Gillis, Absolute Bikes
- 15. Tom Sobal, Quiet Use Coalition
- 16. Logan Myers, Friends of Browns Canyon
- 17. Keith Baker, Friends of Browns Canyon
- 18. Bet Kaiser, Friends of Browns Canyon
- 19. Michael Kunkel, Friends of Browns Canyon
- 20. Alison Ramsey, GARNA
- 21. Alan Robinson, GARNA

Introduction / Background

Tell me about your background and your history with Browns Canyon.

Browns Canyon National Monument

How would you describe the area and its meaning to you? What role does Browns Canyon play in your life?

What values do others place in Browns Canyon?

Future

When thinking about the future, how would you envision Browns Canyon at its best?

How does that future differ from today?

What would you recommend happen to realize that future vision?

What concerns, if any, do you have about the area?

What hopes or concerns do you have about Browns Canyon being designated as a national monument?

What benefits or challenges would you anticipate that the monument might cause for you as an individual? For your community or organization?

Suggestions for Process and Outreach

To bring the national monument to fruition, by law and presidential direction, BLM, the Forest Service in cooperation with Colorado Parks & Wildlife must develop a plan to manage the monument. Before developing the actual plan, the agencies are also doing some preliminary work now, holding workshops and individual conversations to better understand what's important to individuals and local communities.

Who should be involved in the work leading up to and during the planning process?

Who might have concerns or experience upset if not contacted about planning to share their views, history, heritage, experience or other concerns about Browns Canyon?

What is the best way, in your opinion, to gather input from those who care about Browns Canyon?

What is the best way to *share information* about the monument with you and others you know? (i.e. workshops, briefings, web site, regular email, etc.)

If holding in-person workshops and trying to reach those who care about the area, where would you recommend they take place?

What kinds of outreach / engagement /activities do you or others already have in place that might involve these stakeholders or that this planning effort might be able to draw upon?

As this planning work continues, how would you like to be involved? What is the best way to stay in touch?

Conclusion

Is there anything else that you haven't mentioned? What advice would you offer or what else would you recommend to move this effort forward?

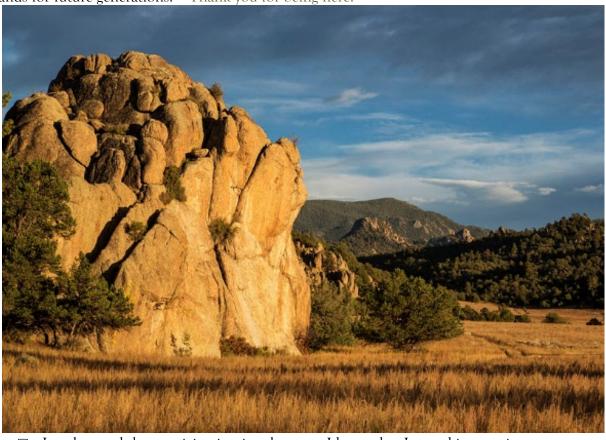
Who else, if anyone, would you recommend that we speak to as part of this assessment?

Appendix B. Listening Session Mapping Protocol

DOT TABLE ID OWNS CANYON NATIONAL MONUMENT

Overview

We invite you to share with us how you connect with Browns Canyon National Monument. We want to know what places are special or important to you so that we can best manage our public lands for future generations. Thank you for being here!



☐ I understand that participation is voluntary. I know that I may skip questions or stop at any time. All information is confidential; only combined or aggregated results will be reported. There will be no way to trace response to individuals.

Zip code of your primary residence:

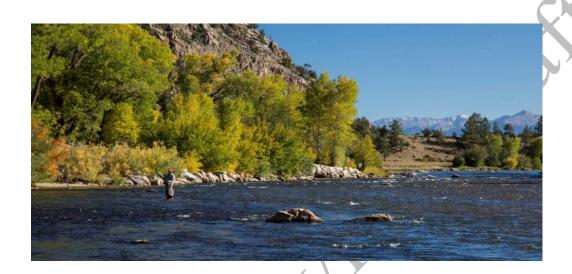
PART 1. Mapping Resource Interactions

<u>Instructions</u>: This next activity will be an opportunity to share your connections with the Browns Canyon National Monument using a map.

Please identify <u>up to 5 areas</u> in **Browns Canyon National Monument** that you visit, use, or interact with in some way. These could be areas that you...

- visit or use for recreation
- spend time with family
- work or volunteer

- hunt, fish, forage
- enjoy the views
- collect minerals



STEPS

- 1. Use your assigned sharpie pen color.
- 2. For each place, draw a line, shape or circle around the entire place that matters to you.
- 3. Write #1 next to that place.

Check all that apply.

- 4. Answer questions on the worksheet for Place #1.
- 5. **Repeat Steps 1-4** for Places #2, #3, #4, and #5. [Maximum 5.]

If someone at the table has a place that is the same as yours, mark the map so that we can read both of them.

Pla	ace #1 What is this	area called?			
	Seasons visited:		Summer	Fall	Winter
1.2	How often do you	visit this area	in a typical y	ear?	times/year
1.3	Interactions: What of	do you do in th	nis area? Acti	vities, hobbies	, practices

	RE & HERITAGE		TYLE	<u>LEISU</u>	
	View nature		Fish		Scenic Drive
	Photography/Art		Hunt		Camp
	Watch wildlife		Gather or Forage		Relax
	Bird watching		Collect gems/rocks		Picnic
	Outdoor education		Horseback riding		Family
	Visit historical site		Stewardship/volunteer		Social event
	Cultural traditions		Spiritual		Resort
	Science		Therapeutic/health		
					CX
LIVEL	IHOOD	ACTIV	VE RECREATION	MOTO	ORIZED
	Guiding		Raft/kayak/canoe		Motorcycle
	Mining		Hike/walk		Off-highway vehicles
	Grazing		Backpack		Motorized boating
	Work		Rock climb		Snow machine
	Forest products		Bike		7
	Firewood		Ski/Snowshoe	6	Other:
			4		
1.4 F	woodland, springs, streams, hab	, 100	1 / //		variable resolutees.
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1.5 Cl	hanges: What changes have water quality? scenic quality? some #2 What is this area can Seasons visited: How often do you visit this nteractions: What do you conclude the check all that apply. WRE & HERITAGE View nature Photography/Art Watch wildlife Bird watching Outdoor education Visit historical site	you obcial conditions and series area in the LIVEL	served in this area? [Wild ditions?] Summer Fall In a typical year? this area? Activities, hobby LIHOOD Guiding Mining Grazing Work Forest products Firewood	dlife habitat? Win imes/year bies, practio	physical landscape? air or http: Hunt Gather or Forage Collect gems/rocks Horseback riding Stewardship/volunteer Spiritual

	Hike/walk		Camp	MOTO	DRIZED
	Backpack		Relax		Motorcycle
	Rock climb		Picnic		Off-highway vehicles
	Bike		Family		Motorized boating
	Ski/Snowshoe		Social event		Snow machine
			Resort		
LEISU					Other:
	Scenic Drive				
2.4	Features: What site features	attrac	t you to this particular	r area? [e.g., ca	nyon, river, gulches,
	forest, woodland, springs, stream				
2.5	Changes: What changes have	e you	observed in this area?	[Wildlife habit	at? Physical landscape? Air
	or water quality? Scenic quality?	Social c	conditions?]		
				1	
Plac	e #3 What is this area call	led?			
		oring	Summer Fall	Win	- utor
	•	_			itei
	How often do you visit this a				
	nteractions: What do you do	o in th	is area! Activities, no	bbies, practice	es
	Check all that apply.		V J		
N. T. A. FETT	TOP 6 TIPDIES OF	TIPEC		I FIGU	TDE
	JRE & HERITAGE	LIFES		LEISU	
	View nature		Fish		Scenic Drive
	Photography/Art	,	Hunt		Camp
	Watch wildlife		Gather or Forage		Relax
	Bird watching		Collect gems/rocks		Picnic
	Outdoor education		Horseback riding		Family
	Visit historical site		Stewardship/volunteer		Social event
	Cultural traditions		Spiritual		Resort
	Science		Therapeutic/health		
1 13761	LIHOOD	A CTIV	VE RECREATION	MOTO	ORIZED
	Guiding		Raft/kayak/canoe		Motorcycle Off highway yabialas
	Mining		Hike/walk		Off-highway vehicles
	Grazing		Backpack	П	Motorized boating
	Work		Rock climb		Snow machine
	Forest products		Bike	_	0.1
	Firewood		Ski/Snowshoe		Other:

3.4 Features: What site features attract you to this particular area?

3.5 Changes: What changes have you observed in this area?

Plac	e #4 What is this area	called? _				
4.1	Seasons visited:	Spring	Summer	Fall	Win	iter
4.2 H	How often do you visit thi	s area in	a typical year?	?tir	nes/year	
4.3 I	nteractions: What do you	do in th	is area? Activi	ities, hobbies	s, practice	es
	Check all that apply.					
NATU	JRE & HERITAGE	LIFES	TYLE	. 1	<u>LEISU</u>	RE
	View nature		Fish			Scenic Drive
	Photography/Art		Hunt			Camp
	Watch wildlife		Gather or Fora	7./		Relax
	Bird watching		Collect gems/r			Picnic
	Outdoor education		Horseback ridi	9		Family
	Visit historical site		Stewardship/vo	olunteer		Social event
	Cultural traditions		Spiritual			Resort
	Science		Therapeutic/ho	ealth		
LIVEI	JHOOD	ACTI	VE RECREATION	ON	MOTO	ORIZED
	Guiding		Raft/kayak/car			Motorcycle
	Mining		Hike/walk			Off-highway vehicles
	Grazing		Backpack			Motorized boating
	Work		Rock climb			Snow machine
	Forest products		Bike			
	Firewood		Ski/Snowshoe			Other:
1 1	Total Wiles Site foots				?	
4.4	Features: What site featu	ires attra	ct you to this j	particular are	ea:	
1 5	Changes What shapes	have you	s abaserrad in t	hic area?		
4.3	Changes: What changes	nave you	i observed III t	ins area:		
Plac	e #5 What is this area	called? _				_
	Seasons visited:			Fall	Win	ter

5.2	How often do you visit	this area ii	n a typical year?	imes/year	
5.3	Interactions: What do	ies, practi	ces		
	Check all that apply.				
NATU	URE & HERITAGE	LIFES	TYLE	LEISU	U RE
	View nature		Fish		Scenic Drive
	Photography/Art		Hunt		Camp
	Watch wildlife		Gather or Forage		Relax
	Bird watching		Collect gems/rocks		Picnic
	Outdoor education		Horseback riding		Family
	Visit historical site		Stewardship/volunteer		Social event
	Cultural traditions		Spiritual		Resort
	Science		Therapeutic/health		
			4		
LIVE	LIHOOD	ACTI	VE RECREATION \	MOTO	ORIZED
	Guiding		Raft/kayak/canoe		Motorcycle
	Mining		Hike/walk		Off-highway vehicles
	Grazing		Backpack		Motorized boating
	Work		Rock climb		Snow machine
	Forest products		Bike		
	Firewood		Ski/Snowshoe		Other:
			7 1		
5.4	Features: What site fea	itures attra	ct you to this particular a	rea?	
,			, i i i i i i i i i i i i i i i i i i i	**	

5.5 Changes: What changes have you observed in this area?

PART 2. Mapping Special Places

Instructions: This final activity will be an opportunity to share your special connections with unique sites in the Browns Canyon National Monument. These may be places you visit often or places you have never visited, but that have meaning, symbolic importance, or historic significance.

Please identify up to 3 places in Browns Canyon National Monument that are especially significant or special to you. These are places with deep meaning or value. Use a colored dot to place on the map.



STEPS

- 1. Find your place on the map and place your <u>colored dot</u>. Label #1.
- 2. Fill in the questions on the worksheet for Place #1.
- 3. Repeat Steps 1-3 for Places #2, #3
- 4. You do not have to use all 3 dots.
- 5. If someone at the table has put a dot on the same place as yours, put your dot next to it, so that we can read both of them.

Place #1	Name/Location of Special Place	:	
1.1 Mean	uing: Why is it significant to you?	What does this pl	ace mean to you?
1 2 1 1	X 1 X 1	· · · · · · · · · · · · · · · · · · ·	
	pe Values: What values or benefi	ts to you associate	with this place: Check up to 3
from the list			
/	Economic/Income		Cultural
	Hunting/Fishing		Ecological/Wildlife/Aquatic
	Recreation/Adventure		Solitude/Sounds/Quiet
	Relaxation		Spiritual/Religious
	Gathering/Foraging		Fitness/Wellness
	Discovery/Learning		Symbolic
	Scenery/Views		Scientific
	Family/Social		Beauty
	Historic		Other:

<u>ce #2</u> Name/Location of Special Place: Meaning: Why is it significant to you? What does this place mean to you?					
Weating: Wily is it significant to you: What does this place mean to you:					
	pe Values: What values or benefit	s to you associate	with this place? Check up to		
the lis	t below.				
	Economic/Income		Cultural		
	Hunting/Fishing		Ecological/Wildlife/Aquatic		
	Recreation/Adventure		Solitude/Sounds/Quiet		
	Relaxation		Spiritual/Religious		
	Gathering/Foraging		Fitness/Wellness		
	Discovery/Learning		Symbolic		
	Scenery/Views		Scientific		
	Family/Social		Beauty		
	Historic		Other:		
the lis	t below. Economic/Income				
	Hunting/Fishing		Other:		
			Other:		
	Recreation/Adventure		Other:		
	Recreation/Adventure Relaxation		Other:		
			Other:		
	Relaxation		Other:		
	Relaxation Gathering/Foraging		Other:		
	Relaxation Gathering/Foraging Discovery/Learning		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social Historic		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social Historic Cultural		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social Historic Cultural Ecological/Wildlife/Aquatic		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social Historic Cultural Ecological/Wildlife/Aquatic Solitude/Sounds/Quiet		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social Historic Cultural Ecological/Wildlife/Aquatic Solitude/Sounds/Quiet Spiritual/Religious		Other:		
	Relaxation Gathering/Foraging Discovery/Learning Scenery/Views Family/Social Historic Cultural Ecological/Wildlife/Aquatic Solitude/Sounds/Quiet Spiritual/Religious Fitness/Wellness		Other:		

That ideas or concerns do you have about these places or how they are	being
anaged? Do you see opportunities for new approaches?	
THANK YOU FOR PARTICIPATING! PLEASE GIVE THIS BOOKLET TO THE TABLE	
FACILITATOR.	

Appendix C. Details on Data Processing and Geo-spatial Analysis

Data entry and processing:

Spatial data

Live community sessions

Resource interaction polygons and special places points were stored in separate file geodatabase feature classes. A unique User ID was created for each participant by concatenating the session location, table letter, and number referenced on their mapping packet (e.g. SB5: Salida session, table B, packet 5). Each spatial feature was also assigned a unique Place ID, which was a concatenation of the User ID (e.g. SB5) and the feature number, 1-5 or 1-3 for resource interaction areas or special places, respectively (e.g. SB51, SB52, SB53). If a participant indicated a location on the map, but did not provide any corresponding reference name or information in their mapping packet, the feature was not digitized.

Online sessions

User ID and Place ID fields were populated for each imported online feature to align with the established community session data structure. The User ID for the online records was comprised of a "W" indicating a web-based session, and a sequential identifier for each online participant (e.g. W145, W146, W147). The online data was reviewed for potential application-driven errors, such as a duplication of participants and/or spatial features—such duplications were removed. To analyze the online and community session resource interaction areas together, a small buffer was created around the points (100 meters) to create polygons. These polygons were then merged into the existing online resource interaction areas polygon feature class.

Attribute data

Live community sessions

Data from the participant mapping packets were transcribed into an excel workbook. Attribute data for the resource interaction polygons and special places points were stored in separate spreadsheets. Columns were created in the spreadsheets for the unique User ID and Place ID for each feature—this ultimately enabled linking the non-spatial data stored in the excel spreadsheets to the spatial data stored in the GIS feature classes. Additional information provided by the session participants—place names, interactions, landscape values, and responses to other open-ended prompts—was organized into individual columns for various organizational and analytical purposes. An additional spreadsheet was created to store general information tied to each session participant such as gender, zip code, visitation to the monument, and responses to group activities and discussions. These data were not explicitly linked to a specific spatial location, but were used for additional qualitative

analysis. If a participant provided information regarding a location within their mapping packet, but did not indicate a corresponding location on the tabletop map, the record was not transcribed.

Online Sessions

Online session non-spatial data were treated similarly as the community session non-spatial data. Attribute data for the online spatial features were delivered within an excel workbook with separate spreadsheets for online resource interaction areas, special places, and additional qualitative data. These spreadsheets were adapted slightly to mimic the format of the existing community session attribute tables. Columns were created in the spreadsheets for the unique User ID and Place ID for each feature—again to enable a link between the non-spatial data stored in the excel spreadsheets to the spatial data stored in the GIS feature classes.

Once the community and online data was digitized, transcribed, and formatted, the feature classes were reviewed for QA/QC, joined to the excel spreadsheets using the Place ID, and merged into joint feature classes. Once combined, the resource interaction area and special places data were ready for further disaggregation and various spatial analyses.

Resource interaction area density analysis

Resource interaction area density was achieved by overlaying the unaltered polygons and calculating the number of overlapping polygons for each area. This requires breaking the original polygons into the minimum mapping units, or the smallest polygons required to show all overlaps. These newly created polygon slivers are created through a union of the feature class with itself. The outcome of the union breaks the original polygons into all overlap combinations, but each shape is replicated by the number of times polygons overlap in that area. The next step is therefore to dissolve, or aggregate, all polygon slivers with the same area into only one polygon. When we do this, we summarize the attribute item "VALUE" to add up the number of polygons overlaid in that area. The result is only one polygon for each overlapping area, with the number of overlaps recorded in the VALUE field.

Special places density analysis

A kernel density calculation was used to show the concentration of special places points. Kernel density is determined by first measuring the number of points that fall within a specified search radius from each point. The kernel density tool determines the optimal distance from the arrangement of points in the input dataset, which we rounded to a 2,000-meter search radius. We then calculate density as the number of points per square mile within the search radius for each special place, then overlay all search radius values into a composite. The output is a raster file, where each 10x10 meter pixel has a value for the composite number of special places per square mile, which is a density surface shaded from light to dark.

All data are georeferenced to UTM Zone 13 North using the NAD83 datum.

Appendix D. Details on Zip Code Analysis

A description of the four zip code zones is provided in the table below. The 29 participants

who did not provide a zip code were not included in this analysis.

Zip code zone	Description of zone	Zip codes included	No. participants
Local Arkansas River	Zip codes located	81201, 81211, 81236,	
Valley	within or near the	80461, 81233, 81242	_149 (53%)
	local Arkansas River		149 (5570)
	Valley community		
Urban Front Range	Zip codes located	80537, 80203, 80863,	
	within or near the	80921, 80465, 80524,	
	metropolitan areas	80127, 80907, 80920,	
	along the Front Range	80218, 80831, 80205,	~
	of the Colorado	80113, 80207, 80216,	
	Rocky Mountains—	80231, 80521, 80123,	
	Boulder, Denver,	80221, 80215, 80002,	
	Colorado Springs,	80909, 80906, 80919,	
	Pueblo, etc.	80129, 80908, 80504,	75 (27%)
		80026, 80031, 80104,	
	•	80107, 80118, 80121,	
	4	80212, 80439, 80220,	
		80809, 80904, 80911,	
		80304, 80305, 80903,	
		80918, 81007, 80501,	
		80224, 81005, 80209,	
		80211, 80128, 80033	
Rural Colorado	Zip codes within the	81212, 81328, 81524,	
	state of Colorado that	80487, 81223, 81240,	
	were not local to the	81601, 81623, 81131,	
	Arkansas River Valley	81132, 81052, 80498,	33 (12%)
	or the Urban Front	81122, 81230, 80820,	
	Range communities.	81501, 80443, 81144,	
		80435, 81401, 81419	
Out of State	Zip codes located out	97031, 99204, 98136,	
4)	of the state of	82070, 88007, 97601,	
	Colorado.	95667, 96145, 20132,	
		76092, 88011, 22046,	
		20818, 20895, 59102,	25 (9%)
		22003, 28083, 98201,	
		82609, 89701, 78730,	
		20878, 15228, 79118,	
		59801	

Appendix E. Complete List of Resource Interactions

Rank	Resource Activity	No	Pct.
1	View nature	448	70%
2	Hike/walk	397	62%
3	Watch wildlife	299	47%
4	Photography/art	264	41%
5	Relax	246	38%
6	Camp	214	33%
7	Raft/kayak/canoe	200	31%
8	Bird watching	199	31%
9	Picnic	180	28%
10	Family	171	27%
11	Therapeutic/health	161	25%
12	Outdoor education	154	24%
13	Scenic drive	145	23%
14	Spiritual	144	22%
15	Backpack	128	20%
16	Fish	127	20%
17	Science	109	17%
18	Stewardship/volunteer	108	17%
19	Visit historical site	99	15%
20	Social event	88	14%
21	Guiding	88	14%
22	Rock climb	79	12%
23	Off-highway vehicles	79	12%
24	Collect gems/rocks	76	12%
25	Bike	74	12%
26	Cultural traditions	65	10%
27	Horseback riding	56	9%
28	Work	56	9%
29	Hunt	55	9%
30	Motorcycle	51	8%
31	Ski/snowshoe	44	7%
32	Mining	36	6%
33	Gather or forage	34	5%
34	Grazing	27	4%
35	Resort	16	2%

36	Firewood	14	2%
37	Snow machine	9	1%

Public Review Draft

Appendix F. Management Concerns and Ideas for Browns Canyon

Managing Public Use

Bench is critical for lunch and camp stops; can be crowded. Need to have large numbers of people be able to use this area and hike into the monument. AHRA should manage (commercial) day hikes here. Also need to prevent land-based users from camping at these sites-reserve sites for water based use from May to Labor Day. Possible name and label river campsites, and create reservation system for boaters.

That you find that elusive balance between managing it as a public resource without letting us love it to death.

Don't tell people about Railroad Gulch so they can't ruin it.

My main concern is the pushing of tourism in the area, when the infrastructure is not ready. I don't want to see the area overdeveloped.

People are going to come visit Browns Canyon. We need to manage and direct that traffic in ways that will mitigate negative impacts. That means certain areas will be high use. However, we need to make sure the majority of the monument see's minimal impacts.

Overnight camping by backpackers and boaters needs to be coordinated. We need boater and hiker camps designated like in the Gunnison Gorge NCA. A sign in box at Ruby Mountain would allow users to see what use is occurring before they enter the BCNM.

Over-use. We don't want to limit the number of people that can visit, but travel and other restrictions should be in place so Browns Canyon does not become degraded from over use. This is particularly true for the river corridor.

[Concerned about] peregrine nesting success with increased traffic and hiking. Where will they camp? Will it continue to impact the 4-mile recreation area (which is probably at capacity)? With increased use, can more money be designated for USFS/BLM presence in the area? I see increased river use and increased social trails into the monument from the river. May need some design trails from the river a short distance. Would like to leave area untrailed as much as possible. Leave it natural; no visitor's center. Designated parking in Turret w/ input from residents.

How to accommodate camping? 4-mile can't take any more camping, already too crowded.

Entry points? Turret shouldn't be disturbed, Ruby Mountain and Hecla are congested with no parking space.

Natural things that people want to see are concentrated in the Railroad Gulch-this needs to be carefully managed.

Over-access concerns. "I think everyone deserves to see it, but how do we allow this sustainably?"

Over-crowding by recreation users and the impact on adjacent four-mile area. This could be detrimental if not addressed in a timely (quick) manner.

Increase in use distracts from experience. Too crowded. Loss of ability to gather rocks/minerals.

Never become a National Park. More developed trails, both hiking and mountain biking. Develop overlooks and campsites along Aspen Ridge.

My concern is what the future will hold for this area. Will a private boated be given a permit to run Browns Canyon? Will we no longer be able to use Ruby Mountain to access four-mile for motorcycle riding? Will this designation draw so many people that some historic uses get left behind?

Worried about flood of people (camp, trash).

Allow visitors but don't build an express way to bring them in. Don't advertise in such a way as to trample area to death.

Concerned that increase in traffic will be detrimental and easy access areas will be inundated.

Building regional trails? Rafting is very busy. How to manage the population? Carefully designed hiking trails. Need developed campground. Keep people out of Turret. Hate to see more visitation on Aspen Ridge, but could see it happening. Trail along the river-developed for serious hiking trails.

Visually you cannot disconnect the monument and the peaks. "Keep people on the river. Concerned about overfishing the river and bringing in people that have a lack of understanding for how to cure the natural landscape.

Stressed by overflow of camping; already over-stretched. Should be designated camping sites.

It will attract too many people.

The good news is almost everything identified is on the perimeter. I'm concerned that some of them may get "loved to death". So we need to channelize ad focus uses and use areas, such as turnouts & overlooks on Aspen Ridge Rd.

Concerned about a few backpackers taking up few spots that rafters can spend the night. Would like for AHRA to permit the rafters to do hikes into mountains. Does not want rails to trails.

Scare tactics to keep people away? Turret needs to be protected.

My concerns are in the development for hikers. I would like to see campsites by the river left for boaters only. Also, I would hate to see walking tracks and overlooks - they would completely ruin the feel of the river.

Throughout Colorado, huge increase in wilderness use. Movement towards how to educate users and how to educate different users. BCNM will draw more users because of the designation.

Economic value may take precedence. "I'm willing to stop using it in order to preserve it in fear of it being loved to death."

That the "GUV" will pave paradise.

Need to manage any overuse of the river and the whole area. Manage physical impact, number of users to reduce social and physical impacts.

I'm concerned that National Monument designation could create a "neon sign" that draws in new crowds, and new motorized use...

Does not want to see Turret turned into a parking lot.

Direct people there in other ways. HECLA. Send people to HECLA or Ruby.

Directing access, when traffic is already present.

I fear it will grow in area and cost.

Hiking permitting for hiking from the river (e.g. Day hike at lunch, and an all day trip). Rock climbing permitting in the monument. Campsite sign-in box for designated sites. Heavily impacted, camping is a concern. Ruby Mountain campground and the southern end of 4-mile is going to be impacted. Nice to not have any major trails. Talk to the residents of Turret, so neighbors are not bothered-talk to them directly, work with them. Concerned about camping in the area where there is no water.

My concerns are not of a personal nature. My concerns revolve around maintaining our current uses without restrictions which limit our uses. These restrictions could be excessive fees or limited access quotas.

I would like to see the river pit in at Ruby Mountain remain private. I would also like to see the campground remove the reservations. It has become more of a RV park rather than a river rafting campground.

Increased traffic by visitors is a problem for local residents.

Keeping areas remote. Permitting or limiting some management of dispersed camping along the river.

The area needs more access for people to disperse the utilization of the areas. If everyone is in one spot, the appeal goes down and resources are exhausted.

Access

Hiking access from the river. Added rock climbing opportunities. More access; not necessarily more trails, just access points.

Have flat trails for easier access for elderly/disabled. Give them access to area like Ruby Mt.

Improving access (for rock climbing). Ways to get into interior (without overblown development). Spur road, pedestrian crossing.

Work with the BLM, Forest Service, and Chaffee County to insure all interests are represented. I love my wilderness areas as well as riding my mountain bike and off road and adventure motorcycles. I believe our public lands need to be managed for everyone. Access to the Monument for handicapped, wounded warriors, and the elderly is non-existent.

Open old roads to allow access for all.

Allow reasonable access for elderly and handicapped.

Hiking trails outside of Ruby Mountain are not real easy for older folks. Not bad for me but my mother who is 74 has a difficult time with trail.

Special care needed in deciding on additional trail development to avoid overuse.

Concern with negative impact with Turret residents. Problems in day use access.

Stone bridge should be public access.

Access on SE end (Turret trail access): be clear where it is. Don't pave it! Austin Trail access. Sedans in ditches.

There are people who will not be able to enjoy their land.

Road closures are a concern for years. Access to the area for disabled. Local opportunities for new businesses.

A complex. Reef-river, composite gets on Reef. Great potential circuit. Issue: Turret access. Challenging access. Great introduction to monument.

Improve access for visitors to increase safety and collaboratively work with Chaffee Co. To maintain roads.

Accessibility-make the river the main way to experience BCNM; make backcountry hiking the other way to access.

Continue and increase wilderness backcountry use of monument east of river corridor. Would like to see better access at Ruby Mountain for clients with special needs and fishing boats.

Wants to see a usable national monument. Re-open some roads-this is good on a business and personal level. Improved (motorized) access. Limiting access is the worst thing we can do.

Access across railroad is difficult, but not impossible.

Access for youth; waterfalls don't run anymore; address ecology and hydrology restoration in management plan; manage parking lots effectively, maybe with mass transit; consider air and water pollution; local communities need access to their monument.

All three access points to Railroad Gulch pass through private land or railroad. That needs to be a designated USFS.BLM route. These three access points have been used historically since the late 1800's. This needs to be resolved in the management plan! Balancing accessibility. Accessibility with protection.

BCNM East is "only mechanical access to BCNM"-crucial to limit access, especially motorized vehicles. These are fragile environments. I don't mean to be greedy, but need to educate and control where people go. "I have a big fear of corporation draining profit here and sucking money out of our community. If there's money to be made, we want to keep it locally." We need safe, manageable roads. Need a balance between this and making them not so accessible that tons of people come to overuse the land.

Concerned that the designation (BCNM) will make private access difficult. Does not want to have to get a permit, but realizes it may be needed.

Trails developed along the east side for access from Aspen Ridge

Use by all local residents for myriad of purposes. Freedom of choice not controlled by the federal government as imposed by POTUS. Inclusion of local residents in the planning team and regulations of the monument.

I would hope that the leaders in charge allow for access into the monument, multiple roads from the eastern boundary and two bridges, one the northern end and one around the Hecla junction recreation area.

I would like to see the access road 184 north from Turret open and available to access the Brown's Canyon area. With little access anywhere else into Browns Canyon this road can give serve a unique purpose in allowing all user groups an opportunity to visit. I would like to see the monument remain accessible to horses, hikers and others.

Great overlooks, turnouts, camping sites. Areas to improve accessibility, view, the valley. (road doesn't need improving). Nature trails.

Reef/Lower Spires are rugged, hard to get to and would like to see it stay that way. Hasn't changed and would like to keep it that way. Good access point for casual hiker. Turret road access would prevent visitors into interior. AHRA still in management. See additional access at Ruby Mountain-be able to back bats right into the river. Hecla Junction has good access. Management should stay as it is. Close Turret Trail at flat area

Would like to see the main entrance on west-side. No additional OHV trails (enough on 4-mile). Keep 185 D area rugged foot trails limited. Direct access traffic to areas that are already busy. Work with search and rescue regarding access for emergencies.

Commercial Rafting and Guiding; River Management

Over the years I have been a visitor and river outfitter in the Browns Canyon area. I have seen a marked change in the way people utilize the river. There has been a switch from day and multi-day experiences to more of a part-day adventure experience.

Keep the river permit-free for private boaters

Keep commercial river access.

of Greens Gulch.

As a river outfitter I am concerned about how this management plan will impact commercial rafting operations. 50% of our use is in Browns Canyon. Additionally, river camps being taken over by hikers is a concern.

Changes in rafting over the years. People do not want to do the whole day thing; they want a quick half day adventure and then move onto the next thing.

Would like to see the river be maintained as wild and free with a limit of commercial use of river.

Let river outfitters operate exactly as they have in the past. No new regulation Cut down on the amount of commercial rafts on the river, it's simply wrong to destroy the experience on the river for other user groups all in the name of Dvorak et al making a buck

I hope private boater access stays easy. I hope commercial access does not change for rafting/imaging. There are a lot of companies, it makes sense to limit new commercial permits.

Too much commercial rafting on river (overuse).

Control the trail access for hiker-only routes. Commercial boating will overwhelm the region, and private boating companies will get pushed out. Designate campsites?

I worry the river corridor is being impacted in rapidly increasing ways (camping, vegetation loss). The solitude is gone already.

Control abuse of the river corridor.

Consider extending Flow Program to extend float boating season/float fishing season beyond August 15th (AHRA). Find and maintain wild and scenic suitability determination for Arkansas River (BCNM).

I don't want to see commercial rafters to overwhelm private boaters. How to instill respect in monument users.

My main concern is in regards to my livelihood as a guide. Over the few years I have been a guide on the Ark, many private boaters have voiced the opinion of having a few days of the week in which commercial rafts ought to not be allowed due to volume. Limiting commercial rafting. Keeping river in natural state.

River - absolutely takes management to keep ecologically sound while catering to heavy human use.

I have experienced Browns Canyon from the perspective of the river hundreds of times. Over the course of these visits, I have had the opportunity to share experiences (rafting, hiking, etc.) With countless others. It's important that this opportunity is protected/expanded in terms of access to the river and hiking around it.

River management-please keep commercial rafting as is. Improved designated camping and RV sites.

No real access unless you wade through the river. Need access 1/3 mile downstrean from Hecla, with access to Railroad Gulch. Need foot bridge (have great access around Turret, Ruby Ridge, Stafford Gulch, but not here).

Desire for Primitive or Low-level Development

Maintaining the "primitive" experience along the river corridor - prevent/reduce fishing/commercial boating conflict, maintaining "pristine" wade-in riparian area for everyone - many groups of rafters (they do not feel crowded) hikers get to see all of the chairs of rafts.

We understand that access to the monument is important (and inevitable) but we ask (perhaps even beg!) That the southern access (in its entirety, including FR 184 and the Austin Trail access) be left as undeveloped and low-key as possible.

I'm crossing my fingers that the existing access bear Turret can remain open, but kept as primitive and un-promoted as possible. Let's keep it as a low-key backcountry option (please!)

Set aside places with limited development, while keeping it public.

Have Turret area remain rugged.

Preserve ability to primitive camp.

Does not think low level development is a distraction. Does not want to see any more significant development.

Recreation Infrastructure/Facilities

Should there be a bridge at Hecla Junction? Visitor center-would be good, but where? Off-site? People need info. More trails for hiking! Maybe two access trails from Aspen Ridge? A river trail along the whole length of the monument. Hiking only trails-no bicycles or ATVs. Parking is a challenge! Where to put trailhead parking?

Boundary of Railroad Gulch needs to be at the top of canyon (gulch). NEED a foot bridge below Hecla Junction near Railroad Gulch.

Turret - It is not an easy trail to maintain. "It needs clarification in terms of access from the town of Turret." Need to work with residents for parking, access, motorized access. Going west down Stafford/Railroad Gulch you have to park close to town. Better parking is needed.

Bridge at Hecla would open up a lot of area for year-round exploration. Improved access.

Turret to railroad gulch tenuous road and parking access.

Info and view access for public - well placed visitor center off highway (would prevent access by unseasoned visitors).

Would like to see an equestrian spot. A place to park horse trailers.

There needs to be an equine parking area & turn around just east of Turret (site checked before).

View point or visitors enter along highway 285. Visitor info at Hecla Jct.

Need developed, sustainable trail to top of the Reef.

Need more trails and trailheads for visitors

Needs single track (for just hikers) in the monument. Needs good trails. Needs access for search and rescue.

There are places along Aspen Ridge Rd. That will make great developed camp sites/camping spurs, turnouts, overlooks, handicapped access spots, etc, youth access. They're already being used. Horse/pedestrian bridge across the Ark at Hecla Jct.

I want to ensure that the recreational opportunities currently present remain intact. We take approximately 20,000+ customers down the river every summer so these opportunities to take guests into the remote nature of this area is paramount.

Additionally, I would like to see additional hiking opportunities from the river up into the wilderness area. I have a concern potential future access to the general public.

Limited access roads with additional hiking would be great!

Sign-in box. Available camping spots, differentiated between large and small camps, so people can plan accordingly. Leave the access as-is; don't improve the roads.

I want a place that takes some work to get there (hike or bike) and has great views-a place you could stop for a family picnic. A well-maintained, well-marked trail is important. Parking a big problem!!!

Some parking for access to Railroad Gulch.

Difficult access via Turret - no parking. Access through Ruby Mountain.

Have to provide services (e.g. Parking lots, outhouses, trailheads).

Historical, Heritage, Cultural

I want to ensure our region stewards this area. That we as locals know more about it, its history, and its unique values. Turning it into a monument has awakened a pride and awareness of something we took for granted. We knew it was special, but lack the science behind why and what the issues are. I want it to be managed in a way that values the wilderness values of the WSA (wilderness study area) and river without disrespecting the heritage. To honor this landscape-all users may need to be more thoughtful and reduce their use so we don't destroy it as uses increase.

Work with railroad to create rapid scouting opportunities; keep it a railroad, not a rail-to-trail.

Ensure people are educated; need to respect locals and local history.

Best for backcountry access in Turret. There is so much cultural, geologic sites, I just hope we agree to keep access and traffic focused where it is already busy. I know it's inevitable, but let's do our best.

Historic preservation of cultural landscape

Identify and close off Native American sites in monument; protect!

Solitude/Remoteness/Wildness

How do we keep area "wild, solitude, and special" with the increased number of people who will visit since it is now a national monument. Keep interior roadless/trail-less to keep ecosystem intact. Maybe (official) trails only if social trails develop. Keep solitude, wilderness. Try to get more money for BLM/USFS to manage monument.

Wanting backcountry, climbing areas, escape from Front Range crowd. Recognize and maintain resources and solitude. "Land first, not recreation first". Preserve ecological values.

It was quiet, not much development. Bridge over river would cause more people to not go; more solitude and peace for those who want it without a bridge.

Develop the trail larger and manage. Like the remoteness, and would like to keep it that way.

Preserve the backcountry. Solitude of backcountry—even though it is accessible. Hate to see intensive development of special places.

Motorized Use

Use of motorcycles in wilderness areas is not a good thing. Have seen this happen.

The use of motorized vehicles and bicycles should not be allowed in the monument.

Access vs. Protection. Enforcement issues (specifically motorized vehicle use on trails).

Preventing off-road vehicle use. It is possible to balance access to this activity while preserving the beauty of this area.

Too much motorized access.

Need balanced 4-wheel access to "back areas", especially for old folks who can't hike it and now feel excluded.

I'd hate to see motorized recreation proliferate in this area. Some level of (current or reduced) access seems reasonable.

Minimizing roads, vehicles.

Motorized vehicles only on roads. No new ATV trails unless ATV'ers pay to build the trails. Reservations/fees required to minimize impact. Pay campgrounds to put in (primitive) on or near Browns Canyon on as many sides as possible. Thanks for your good ways.

Good, easy access for less mobile people. Stop motorized trespass. Could make loop trail. Concerns about motorized-use trails.

Should have limited roads or motorized trails, one going north and south through and a connector or two to the river. This land belongs to all the people and a handful of antiaccess folks should not be allowed to block access for other, less mobile people.

It is my hope and preference that no new roads be created in the WSA and no new mining or other extraction. Old, defunct mines should eventually be cleaned/mitigated,

as well as their access roads. Along the same vein, I would hope and prefer that motorized vehicles (trailbikes, ORVs, snowmobiles) be disallowed or severely restricted in the WSA.

No ATV or four wheel drive access.

Limiting or phasing out motorized use on Turret Trail.

Ensure non-motorized trails in the area.

Concerned about 4-wheeler use.

Seek further or expanded protection

As a veteran of the Iraq War I believe that having areas that are protected are so valuable for the region. Coming back from war in 2009, I required space where I could reconnect with myself and nature and Browns Canyon was the place where I found solace. Browns Canyon provides the space in which people may enjoy outside the chaos of everyday life. I know for those veterans like myself, escape to areas like BC to be able to reconnect and ground themselves. The area that includes BC is such a valuable space that needs to be protected for the future.

Bordering BNL land should be protected similarly to monument.

Close 184 at Greens Gulch to motor use seasonally. Close 184 for winter range. Need to enforce existing motorized restrictions. No bolting for rock climbing. Limit new recreational trail development. Preserve wilderness and roadless values.

Concern about protection of WSA. Prevent intrusion of motorcycle vehicles. Protection of historic/cultural features.

Want to match WSA protections on BLM lands with recommended wilderness on USFS side to maintain the natural values and opportunities for quiet recreation.

The Monument has incredible values for wildlife, quiet backcountry recreation, cultural sites, geologic features, a wide variety of ecosystem types, all deserving strong protection, which would

Keep the monument wild. As Ed Abbey stated, "Wilderness is not a luxury but a necessity of the human spirit, and as vital to our lives as water and good bread."

Best be accomplished by Wilderness designation of lands.

Concerned with all the changes in her lifetime; she wanted to preserve it for future generations.

Preservation of the special qualities of the area. Prevention of future mining in Nathrop area of monument.

I would like to see it stay wilderness.

I want this area managed for the wildlife to help preserve the ecosystem. I also want it preserved for future hikers/backpackers. Let's also preserve the history/culture of the area. Having the entire area designated as a wilderness would be my goal.

Increasing wilderness qualities on USFS lands.

Reconsider/designate majority of BCNM east of river as designated wilderness.

Wildlife

Concern for the wildlife (bighorns, etc.). The impact on wildlife is barely mentioned, there is no way for people to really understand/appreciate the thoughts of wildlife.

Protection of wildlife, roads, a balance is possible with all users with communication.

I have seen many changes and increased usage over many years. It is important to protect the wildlife habitat which is a special low-altitude area suitable for winter range and movement of wildlife.

Concerns: Human wants will supersede the needs of wildlife; that grazing will destroy the habitat; that too many people will diminish the quiet.

I would hate to see cultural sites and wildlife habitat disturbed or destroyed as a result of mining and mine exploration.

Please manage for wildlife and quiet recreational opportunities in the national monument and on public land adjacent to the monument.

Reef and upper part...bighorn sheep reproduction area. CO Parks and Wildlife tries to exclude use in spring when ewes are giving birth to lambs. Should be hard seasonal closures in spring for wildlife protection.

Protection of native wildlife.

Management needs to set limits on human visitation to preserve wildlife habitat and reasons the monument was designated.

Planning Process and Overall Management

I have a historical and personal connection as my family has lived and grazed this area for generations. My greatest concerns are overprotection-taking away opportunities for ALL citizens and multiple uses. I think it should be left alone with limited management changes. I worry about increased use infringing on private property lands around the area. I also worry about cost-who or where funding will come from; agencies are already spread thin-limit the amount of money spent.

Great session and facilitation of this meeting; looking forward to hearing the results! Wants the Forest Service to update the management plan and the roadless rule.

The more involved public is in planning and decision making, the better. Participation helps people understand why certain management choices are made.

Good job of managing river!

Browns Canyon should be managed local as much as possible.

The tri-management agency and applicable regulations related to each authority.

Current management is great from a work and personal perspective. I hope fees don't go up so much-it would prevent my use.

I respect the cooperation between the BLM and the AHRA (Arkansas Headwater River Agency) in the past to create access and manage impact; would love for that to continue for years to come. What is the AHRA's role in river management? Vs. How the monument designation is being managed?

I'm worried that local "stakeholders" with poor understanding and non-science based views are given too much power in the decision-making process, and therefore the land management plans.

I have a lot of faith in the BLM/USFS, and am looking forward to seeing our new national monument.

Preference for dispersed rather than concentrated use; spread out impact rather than concentrating impact.

Signage/Education/Interpretation/Visitor Center

Wants to bring youth (via GARNA), especially at risk youth and/or undeserved youth into the Monument. First time hiking for many. Find ways to utilize BCNM as an outdoor classroom.

Advocate for the deep business (Craig's business). Easy to get turned around in east side-can get lost.

All the signs are wrong.

Be sure to educate those who visit to leave everything they see so that others may enjoy. Better information about hiking, scenic spots.

Would like better access. Hard to maintain improvements. Proper signage to let people know where they are out (trespassing). "People are stupid." Patrolled.

Interpret interests, bilingual, ethical education.

If we don't have a visitor center, we are going to have people driving all over the place. Protect places.

Influx of visitors and how to manage their anthropogenic impacts to the overall landscape. How to manage litter and overuse; how to instill the "leave no trace" ethic in visitors.

Signage on the trails.

Please locate visitor center on west side to keep traffic down on the east and south sides (Hecla Junction is a good spot for visitor center). Please have easy access visitor center to direct traffic into the monument to protect rugged areas.

Concern for people because of lack of trails and structure; difficult country. Would like to see the trails developed correctly to prevent risk to public.

Signage for trailhead access.

Need signage.

Visitor Center at Hecla Iunction.

Habitat, Aquatic Environment

Future potential mining claims and destructive impacts to irreplaceable resources as seen to this location from within the monuments. Climate change and hydrological impacts that reduce flow sustaining aquatic communities.

Ensure protection of ecological integrity.

Roadless. Ecological corridors.

It would be great if upstream management has been more solidly in place to protect Brown's Creek. The waterfalls and associated ecosystem were really nat. Not sure how it lost water, but it doesn't run as often.

Mining, Prospecting, Rock-hounding, Gem collecting

[Provide] mining (recreational) along Ruby Mtn. For geology clubs and rock hounding experience within National Monument.

We were promised a "win-win" scenario, however all 21,500+ acres were withdrawn from mineral entry/claiming/mining ops. We MUST allow for recreational gold prospecting in BCNM, especially in the Arkansas River below the high water mark.

I have heard there's gold buried there.

Rock permit. Can you pick rocks or not?

Eliminating recreational prospecting on Ruby Mountain and the Arkansas River. Yes prior filed claims are grandfathered, but recreational prospectors don't usually have a need to file mining claims.

Is it permitted to collect rocks in the monument with or without a permit? Regulate the rock hunting/scavenging.

Grazing

Grazing allotment. USFS/BLM in and out of monument. Important that the rules are the same.

No overgrazing, or none at all.

I am concerned that ranchers will not be able to use the land to graze. I am also concerned that if activity is limited they will not be able to tend to their animals properly. More trails and tourism brings more people.

We worry that a change in managing practices could affect historical ranching.

Keep it the same

As long as things stay relatively the same, I'll be happy.

BCNM should be protected in its present state, with current uses allowed, apart from extractive industries (timber, mining).

Would like to see management of BCNM stay much as it is now.

Keeping it the same!

Leave as is.

Leave them as be!

Keep much the same as is now. This is why it is special.

Private and Adjacent Landowners/Trespassing (esp. Turret area)

I worry by this designation there will be many more headaches. I think the managing agencies are already spread thin, and with no new funds on the horizon, this could only get worse. Area private property owners have already begun to feel the pressure by the public and intentional or unintentional trespassing.

Can only access Railroad Gulch illegally by crossing through sections of privately-owned land, rivers, and railroads. Some river access needs better management of trails.

Possible approach from 1435 trails - some motorbikes trespass here.

Concerned about Turret trespassing.

Represent local cattleman association. 4 families, recommend 5+ management. Don't put more people on front road in the monument. Maintain current Aspen Rd.

Help with signage to preserve private property rights.

Limiting trespassing on private land around Turret.

Manage Turret Trail use to reduce conflict with visitors and Town of Turret residents.

Access to monument go through private property.

Railroad Trail Conversion

I am concerned about converting the railroad to a trail. I hope all AHRA continues to manage recreation on the river corridor.

The railroad bed could be an improved trail, perhaps a regional connector. My experiences have been very satisfying with expectations, settings, experiences, outfitters (service providers). Dealing with increased population and managing the setting and social outcomes.

Will those railroads be converted to rails to trails to allow access to railroads, or will it be left a mystery?

Heart of Browns Canyon. Does not want rails to trails; would change the experience, and would prefer not to, but worried people may expect it.

Funding and Capacity for Management

Concerns about management agencies spread thin; funding for proper management may not be available.

More management will require more funding.

Triple BCNM/USFS federal budgets! The agencies need more funding to do BCNM.

Designation of Monument

Wonders if the designation was the best way of protecting the area?

The designation of the Browns Canyon National Monument was promoted by business owners to increase business. The intent of the proponents was not actually to protect anything but their own incomes.

Water

Concerned about watershed health, from both increased human traffic/development and wildland fire. Water related issues including water rights are very complex and heavily rely on the Arkansas River.

Access for dogs

I hope I can always bring my dog.

Fees? Abilities of locals to enjoy it. Bringing dog. Commercially; small business.

Fees-don't want fees. Pets allowed in monument.

Love to see dogs and dirt bikes allowed.

Community and People of Browns Canyon

BCNM seems to have incredible diversity of people-first values (cultural, historical, recreational) and place-first values (ecology, wildlife, water quality and quantity). I am a big recreationist, so I do want these opportunities supported, but I feel very strongly that place comes first. Management should prioritize those ecological and wildlife values over recreation and access given that we can't really replace. If we lose those, the recreation and people-first values lose their allure and significance.

Been in BCNM only a few times. Education and communication are important.

Uncategorized

Protect private property, preserve existing grazing, lumbering, hunting, etc. Weed and fire management.

My biggest concern is the mining claims to potentially dredge along the river by Nathrop. Does not think people access from Aspen Ridge. Public land, but job for stewardship is on locals. Access is an issue (Ruby Mountain and Turret Road). Thinks Ruby Mountain is most publicized place. Had mining law discussion about what is allowed, what is not, not defined at this point.

Clean up railroad debris!! More education/outreach on Antiquities Act and history of the region.

Does not want use on the west side of the monument to cause limitations for use on the east side.

Encourage a "Friend of BCNM" whole would support trail maintenance guided hikes. Good signage. - Future management on FR 185 - limit dispersed camping to designated sites/ 1 or 3 sites each/ marked pull off. - Ensure adequate sanitation at river stops and access point. - Turret Trail > convert to non-motorized. -

Increase search and rescue. BLM sat down with S&R, and their busiest season was 2016. In terms of access, I approach Fisherman's Bridge in two ways: 1). Through River Runners if I am rafting, and 2). By 301 if I'm picnicking on the east side of the river. I hope that the dispersed camping to the south of the monument stays dispersed. More information regarding the status of the monument. Branching out of HRA property. Looking to see if the BLM? USFS consider overnighter behavior for branching out of these regions. "impact mitigation.

Additional traffic on Aspen Ridge Road; cause-effect after monument designation on OHV use. Good campsites, human waste is an issue.

Ruby Mountain trail is suspect (washes out), difficult with horse/mule. If trails anywhere, reopen and repair existing. Limit trails and access. No mining by Nathrop.

Appendix G. Complete List of Final Comments

Concerns about Crowding, Over-use, Commercialization, and Scale of Recreation Development

- Make sure people don't think of it as a Disneyland experience. Too frequently, I see inexperienced tourists near rivers and playparks they don't understand the power of water and Mother Nature.
- A reduction in the number of commercial rafts allowed per day would greatly increase the quality of the recreational experience.
- > Browns has potential for more use, but should be impacted lightly.
- ➤ Did I mention that there are too many commercial rafts!
- Don't allow lots of commercial permits, e.g. mountain bikes, horse, a couple are ok. Don't change rules for river outfitters. Keep interest groups like Friends of Browns Canyon involved and LISTEN. Thanks for your efforts!
- ➤ I also think it's worth distinguishing the uplands/interior, which are relatively lightly used, and the river corridor, which obviously gets LOTS of use.
- ➤ I hope to do more hiking in the BCW. Can we keep this a secret again now that it's protected? Thanks.
- I think new developments of roads, trailheads and trails should be kept to a minimum and really try to maintain the wilderness character. Thank you
- Quit building trails! If people want urban trails they should stay in Denver!
- The area as is a special haven. Promoting it will only damage it further. Look at what has happened to the Four-mile landscape as it has been promoted. There are fewer animals seen, more land scarred by unknowing tourists, and dangerous roads.
- ➤ Please keep it as wild as possible, minimize the pavement and annoying Forest Service over sized buildings.
- This is probably the first and most visited place I use and go to in Colorado. My children have started going on whitewater trips with me. So, I would like to see it remain un-permitted for whitewater users and slanted for use by private boaters.

Desire for Expanded Access/Recreation Infrastructure

- Access / Create an access over the river from Hecla Junction
- The parking area at Ruby Mountain is currently insufficient to support public access into the Fourmile Management Area, much less to support the additional demand of Monument wisitors
- Access is limited and trails need to accommodate bikes.
- > Availability of mountain biking within monument.
- > Build more hiking and biking trails.
- **>** Keep motorized vehicle access as promised the monument proclamation.

- Establishing campgrounds other than Ruby Mountain, would be great as it seems like a busy whitewater campground.
- ➤ I have a motorized trail adoption group and if there is a need to help manage this area my group would do what is necessary to protect this area while maintaining motorized access.
- ➤ I would like a visitor's center at Hecla Junction and a pedestrian bridge over the Arkansas River to give better trail access to the center of the monument.
- If funding becomes available, improve the private boater launch at Hecla, improve the signage for the boat launch, and on high volume days, create penalties for private boaters who use the commercial launch and commercial boats who use the private launch.
- Love to see a long trail along the river. Would be really fun in the summer to view the rafters. Wish Railroad Gulch had made the boundary.
- ➤ Make access roads
- > Open it up to the public and not the few.
- Please open up recreational prospecting on the edge of the monument at the Arkansas River and at Ruby Mountain again (or even through the whole monument). Limit it to recreational prospecting only no commercial operations. Add more ATV/OHV friend.
- Please consider keeping trails open for horseback riding. It is part of our heritage and a magnificent way to enjoy the natural beauty of the area.
- > Should be accessible to individuals as we'll as rafting companies.
- Yes. We must enforce the promise that there'd be NO losers, and all user groups would get to keep doing their activities. Also, we must keep all trails, roads, dispersed camp sites open. BCNM must NOT end up yet another plant & animal preserve.

Support for Protection

- The remaining Monument area is not large, but it is very unique and every decision must prioritize protection over access. We must access the area on its own terms that is by non-motorized means. Don't even consider "enhancing" motorized access.
- America's best idea was to protect land and water from destruction. Thanks for keeping the idea alive and the land safe.
- > Happy that it is protected!
- Please keep it just as it is forever!
- ➤ I believe it is important to protect and manage our public lands. The Creation of BCNM was a good thing, but every public land should not be made off limits to motorized vehicles. I believe there should be designated Wilderness Areas as well.
- I'd like to see all lands, either Forest Service or BLM managed for it wilderness characteristics.
- Thanks so much for all of your hard work in finding the best way to protect the amazing landscape.
- ➤ I've worked for 20+ years as a public lands hydrologist and geologist, I have a Master's degree and I'm very interested in protecting natural and cultural resources.

Motorized Use

- ➤ NO MOTORIZED VEHICLES OR EQUIPMENT!!!
- Please keep motorize use away from the river and riparian areas along the river corridor. No more motorized use trails. Improve and manage existing roads for environmental impacts and social impacts to non-motorized users. Concerned for noise impacts.

Comments on Monument Designation

- Ask for adherence to the stipulations in the designation document.
- > [Monument] eliminates historical significance. Open road. Access denied defeats original intent
- Human recreation are not valid historic or scientific reason for designating a national monument. This format does not permit adequate public input on values which are not centered around human use. Intrinsic values.
- Hundreds of local and state-wide individuals, organizations, local governments, business enterprises, and US Senators and Representatives have worked for years to have this area designated as Wilderness. This is a strong constituency for strict protection.
- Leave it alone as it has been used for the past 220 years.
- > Should have been left alone, inserting another lawyer of administration / management is NOT what the area needed. You want to claim to protect it? Fine, make it a wilderness area instead.
- So happy that this is a National Monument. It is a special place here in Colorado that is worthy of protection.
- This designation was a political payback to Senator Udall for his unbending support of Pres. Obama support that cost Udall his job. That is the only reason that this designation was added to the narrow list of inaccessible Monuments.

Planning Process

- The reason outfitters got behind this, was the promise that it would not negatively impact our businesses. The fact that you are now seeking input for a management plan we were told would not change from how it has been in the past is troubling.
- Please practice good stewardship over this wild place; recognize that climate change is affecting all living things; keep the public informed of ongoing plans.

Uncategorized

- I am excited to explore other areas beyond the river.
- It is a beautiful place that is enjoyed for its solitude, and it is a central hub for recreation and the local tourism economy.
- Please abolish this unwanted and unneeded laughing stock.
- > Thank you for the opportunity to provide input.